MARYLAND STATE DEPARTMENT OF EDUCATION
PREPARING WORLD CLASS STUDENTS

Jack R. Smith, Ph.D.
Interim State Superintendent of Schools

200 West Baltimore Street • Baltimore, MD 21201 • 410-767-0100 • 410-333-6442 TTY/TDD • msde.maryland.gov

December 11, 2015

The Honorable Larry Hogan
State House
100 State Circle
Annapolis, Maryland 21401-1925

The Honorable Joan Carter Conway
Senate Education, Health, and Environmental Affairs
2 West Miller Senate Office Building
Annapolis, Maryland 21401

The Honorable Sheila E. Hixson
House Ways and Means
131 Lowe House Office Building
Annapolis, Maryland 21401

RE: Task - Implementation of a Dyslexia Education Program – Extension Request (MSAR #10593)

Dear Governor Hogan, Senator Conway and Delegate Hixson:

The Task Force to Study the Implementation of a Dyslexia Education Program was established with the passing of House Bill 278 by the Maryland General Assembly (2015). House Bill 278 requires the Task Force to report its findings and recommendations on or before December 30, 2015 to the Governor, the Senate Education, Health, and Environmental Affairs Committee, and the House Ways and Means Committee.

The Task Force has met and completed a great deal of the work required. Additionally, Task Force Sub-committees are working diligently to complete the necessary research and documentation. Due to the depth of the work, and the desire by the Task Force to provide a comprehensive and thorough report, inclusive of a Pilot Program for Dyslexia Education, we respectfully request an extension to submit the final report by June 30, 2016.

Should you have questions or need additional information, do not hesitate to contact me or Amanda Stakem Conn, Esq,, Director of Education Policy and Government Relations at (410) 767-0469 or by email at amanda.conn@maryland.gov .

Thank you for your consideration.

Sincerely,

Dr. Joan Mele-McCarthy, CCC-SLP
Task Force Chair

c: Jack R. Smith, Ph.D.
Marcella E. Franczkowski, M.S.
Task Force members

MARYLAND STATE DEPARTMENT OF EDUCATION
PREPARING WORLD CLASS STUDENTS

Karen B. Salmon, Ph.D.
State Superintendent of Schools

200 West Baltimore Street • Baltimore, MD 21201 • 410-767-0100 • 410-333-6442 TTY/TDD • marylandpublicschools.org

December 30, 2016

The Honorable Larry Hogan
State House
100 State Circle
Annapolis, MD 21401

The Honorable Joan Carter Conway
2 Miller Senate Building
11 Bladen Street
Annapolis, MD 21401

The Honorable Sheila E. Hixson
131 House Office Building
6 Bladen Street
Annapolis, MD 21401

RE: Task Force to Study the Implementation of a Dyslexia Education Program (MSAR #10747)

Dear Governor Hogan, Senator Conway, and Delegate Hixson:

Pursuant to the House Bill 278/Chapter 411 (2015), and as amended by Senate Bill 823/Chapter 234 (2016) and House Bill 895/Chapter 235 (2016), the Maryland State Department of Education (MSDE) submits the attached report from the Task Force to Study the Implementation of a Dyslexia Education Program.

In accordance with §2-1246 of the State Government Article, the Task Force Report addresses the following in the report:

(1) make recommendations regarding how the terms "Dyslexia" and "Targeted Students" should be defined;
(2) determine current practices for identifying and treating dyslexia in students in Maryland public schools;
(3) determine current practices for identifying and treating dyslexia in other states;
(4) determine the components and costs of successful dyslexia education programs established in Pilot Costs in Other States;
(5) determine the appropriate structure for establishing a dyslexia education program and make recommendations on:
    (i) the feasibility of funding a Pilot dyslexia education program through the State Department of Education or alternative funding mechanisms and sources or both, including researching grant opportunities;
    (ii) the methodologies that should be used to test students and identify dyslexia and pre-dyslexia tendencies in students;
    (iii) the appropriate age to begin testing for dyslexia and pre-dyslexia tendencies; and
    (iv) the best practices for treating and educating students identified as having dyslexia or pre-dyslexia tendencies; and

(6) develop a pilot program to initiate the implementation of the recommendations of the Task Force in an appropriately limited geographical area.

If you have any questions regarding the information contained within this report, please contact Ms. Marcella E. Franczkowski, Assistant State Superintendent, Division of Special Education/Early Intervention Services. She may be reached at (410) 767-0238 or by email at marcella.franczkowski@maryland.gov. We look forward to our continued partnership in our vision to create an inclusive system of services for children with disabilities and their families.

Sincerely,

Karen B. Salmon, Ph.D.
State Superintendent of Schools

KBS/MEF:cab

c: The Honorable Thomas V. Mike Miller, Jr.
The Honorable Michael E. Busch

FINAL REPORT
of the
TASK FORCE
TO
STUDY THE IMPLEMENTATION
OF
A DYSLEXIA EDUCATION PROGRAM

December 31, 2016

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INTRODUCTION

On May 12, 2015, the Maryland General Assembly and Governor Larry Hogan enacted HB278 to authorize a Task Force to Study the Implementation of a Dyslexia Education Program in Maryland. The Task Force was established in response to parent, teacher, and student testimony that reading difficulties and dyslexia were not adequately addressed by public schools in Maryland.

The legislative charges are:

(1) Make recommendations regarding how the terms "*Dyslexia*" and "*Targeted Students*" should be defined.

(2) Determine current practices for identifying and treating dyslexia in students in Maryland public schools.

(3) Determine current practices for identifying and treating dyslexia in other states.

(4) Determine the components and costs of successful dyslexia education programs established in Pilot Costs in Other States.

(5) Determine the appropriate structure for establishing a dyslexia education program and make recommendations on:

(i) the feasibility of funding a Pilot dyslexia education program through the State Department of Education or alternative funding mechanisms and sources or both, including researching grant opportunities;

(ii) the methodologies that should be used to test students and identify dyslexia and pre-dyslexia tendencies in students;

(iii) the appropriate age to begin testing for dyslexia; and

(iv) the best practices for treating and educating students identified as having dyslexia.

(6) Develop a pilot program to initiate the implementation of the recommendations of the Task Force in an appropriately limited geographical area.

In April 2016 HB 895 and SB 823, introduced by Delegate Anne Kaiser and Senator Joan Carter Conway, respectively, were enacted and signed by the Governor. These bills served to extend the reporting deadline for the Task Force from December 30, 2015, to December 30, 2016, and extended the authorized completion date of June 30, 2017. The following amendments were included in HB895 and SB 823.

- One member of the Task Force who is an administrator of a teacher training program; One

member who is employed by an institution of higher education with expertise in research methodology;

- A requirement to determine how the terms "dyslexia" and "targeted students" should be defined;
- A requirement to determine the components and costs of successful dyslexia education programs in other states;
- A requirement to include research on potential grant opportunities to fund the pilot (in addition to researching other funding mechanisms in the original bill

The Task Force met on 10 separate occasions with each meeting scheduled for 3 hours:

- September 17, 2015
- September 24, 2015
- October 8, 2015
- October 23, 2015
- November 6, 2015
- December 3, 2015
- June 29, 2016
- July 27, 2016
- August 16, 2016
- September 22, 2016

This document is submitted on behalf of the Task Force to Study the Implementation of a Dyslexia Education Program by the Maryland State Department of Education. The views of the Task Force expressed herein do not necessarily reflect the views of the Maryland State Department of Education.

TASK FORCE MEMBERS

Required Membership:

Member of the Senate of Maryland
Hon. Joan Carter Conway, Maryland State Senate – Katherine Spurlock, designee
Member of the House of Delegates
Hon. Anne Kaiser, Majority Leader, Maryland House of Delegates
Superintendent of Schools or designee
Marcella E. Franczkowski, M.S., Assistant State Superintendent
Maryland State Department of Education
Representative of the Maryland Association of Boards of Education
Teresa Milio Birge, Member, Anne Arundel County Board of Education
Representative of the Public School Superintendents Association of Maryland
James Scott Smith, Superintendent, St. Mary's County Public Schools
Representative the Maryland State Education Association
Robin Szymanski, M.S., Maryland State Education Association
Representative of the Maryland School Psychologists' Association
Dr. Valerie K. Wilder, ABSNP

Members Appointed by Governor Larry Hogan:

Representative of an Employee Organization of Public School Teachers
Amy Michele Siracusano, Literacy Integrated Learning Specialist (Teacher) for Calvert County Public Schools
Representative of a Local School System
Lavaunda Roundtree, M.Ed. Teacher, Academic Therapist,
Anne Arundel County Public Schools
Representative of the Dyslexia Education Community
Joan Mele-McCarthy, Executive Director, Summit School
Representative of the Dyslexia Education Community
Martha H. Sweeney, M.S., CCC-SLP, Head of School, The Odyssey School
Representative of an Organization that Certifies Dyslexia Identification Methodologies
Ben Shifrin, Head of School, Jemicy School
Consumer with Experience with Dyslexia Identification, Education and Treatment
Laura S. Schultz, Parent Representative
Decoding Dyslexia Maryland Representative
Lisa Blottenberger, State Leader Decoding Dyslexia Maryland
Administrator of a teacher training program-not appointed
Member employed by an Institution of Higher Education with expertise in research methodology-not appointed

Chair: Joan A. Mele-McCarthy, D.A., CCC-SLP, ASHA Fellow
Executive Director, The Summit School, Edgewater, MD

Staff to the Task Force: Carmen A. Brown, LCSW-C, Branch Chief, Division of Special Education/Early Intervention Services, Maryland State Department of Education

TOPIC PRESENTERS

Laurie Cutting, Ph.D.
Professor of Special Education, Psychology, Radiology & Radiological Sciences, Pediatrics
Patricia and Rodes Endowed Chair
Vanderbilt University
Faculty member of the Vanderbilt Brain Institute, Center for Cognitive and Integrative NeurosciencePatricia and Rodes Hart Endowed Chair

William Stixrud, Ph.D.
Clinical Neuropsychologist
Director, William Stixrud and Associates
Silver Spring, MD
Adjunct faculty at Children's National Medical Center, Washington, D.C.

Emily Phillips Galloway, Ed.D.
Assistant Professor
Department of Teaching and Learning
Peabody School of Education
Vanderbilt University

Julie Washington, Ph.D., CCC-SLP
Professor and Program Director, Department of Communication Sciences & Disorders
Affiliate Faculty of Research on the Challenges of Acquiring Language & Literacy & Urban Child Study
Georgia State University

Margie Gillis, Ph.D., CCC-SLP
Research Affiliate, Haskins Laboratory
President, Literacy How

Carol McDonald Connor, Ph.D., CCC-SLP
Senior Learning Scientist, Interdisciplinary Institute for the Science of Teaching and Learning
Professor of Psychology
Arizona State University
Distinguished Research Associate, Florida Center for Reading Research

Wayne Foster, Ph.D., CCC-SLP/A
Retired, Special Education Director, North Carolina

ACKNOWLEDGEMENTS

Special thanks to the following professionals for their support and assistance:

Kelli D. Cummings, Ph.D., NCSP Assistant Professor, University of Maryland

Linda Farrell, M.B.A., M.Ed., Reading Specialist, Founding Partner, Readsters

Michael Farrell, M.Ed., Reading Specialist, Founding Partner, Readsters

Rebecca D. Silverman, Associate Professor, University of Maryland

Marilyn Zecher, M.A., Certified Academic Language Therapist

TASK FORCE TO STUDY THE IMPLEMENTATION OF A DYSLEXIA EDUCATION PROGRAM

EXECUTIVE SUMMARY

The Task Force to Study the Implementation of a Dyslexia Education Program, HB 278 was enacted by the Maryland General Assembly and signed by the Governor in May 2015, and was amended in April 2016 by SB 823/Chapter 234.

Task Force members would like to thank the Maryland General Assembly and Governor Larry S. Hogan for the opportunity to study the current practices for students with dyslexia in Maryland's public schools and to make recommendations for a pilot Dyslexia Education Program that can provide best practices for Statewide impact.

Task Force Structure and Function

The Task Force met for ten, three-hour sessions with the last half hour of each session dedicated to public testimony. The Task Force meeting dates were publicized and all Task Force documents are available on Livebinders.com. All meetings were open to the public and documents continue to be available to the public via Livebinders.com. Each meeting focused on at least one of the legislative charges required by HB 278 with topics presented by national researchers and experts. Topics included current research and evidence-based practices in the field of dyslexia identification, assessment, and instruction; dyslexia and underserved populations; blending of general education and special education funding; and considerations in the development of pilot programs.

Task Force members had an opportunity to query speakers, and used the presented information to inform the work and formulate Task Force recommendations. Task Force members held virtual and face-to-face subcommittee meetings related to tasks included in HB278 and subsequently SB823 and HB895. Subcommittee chairs provided updates to the full Task Force at public meetings and assisted with writing the final report.

Current practices for students who are struggling readers

Through public testimony and Task Force surveys, parents and educators expressed concern that dyslexia is not acknowledged or identified as a condition of specific learning disability in Maryland public schools, despite its inclusion as a condition of " specific learning disability" in the Individuals with Disabilities Education Act (IDEA) (34 CFR 300.8(c)(10) and its implementing federal and State regulations, Code of Maryland Regulations (COMAR) (13A.05.01.03B(73). When reading difficulties are characterized by deficits aligned with dyslexia, scientific research has identified specific instructional methods and strategies that improve the reading skills in this population of learners. When learning is student-centered, access means teaching students at their instructional level gradually building skills through

evidence-based practice. Currently, across the State, many teachers report limited knowledge regarding dyslexia and practices that produce results in this population of learners.

The Dyslexia Task Force envisions a future for struggling and at risk readers and students who have dyslexia that incorporates:

1. early identification of reading difficulties;
2. foundational reading preparation and practice for teachers and administrators;
3. a systematic infrastructure for effective reading instruction; and
4. support and monitoring of progress geared to improve instruction through data-driven decisions at the classroom level.

What is dyslexia (see page 49)?

Contrary to popular belief, dyslexia is not identified when students or adults see letters and words backwards. Dyslexia is a language-based, reading disorder distinguished by neurobiological origins and specific neurological activation patterns (neural signatures) during reading (Pugh, et al., 2003). Per the International Dyslexia Association, "Dyslexia is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. "[1]

The human brain is pre-programmed to understand and use oral language during typical development. However, the brain is not hard-wired for reading as a natural developmental occurrence. Rather, for many individuals, reading must be explicitly taught. Decades of research validate the language basis of dyslexia and pinpoint key areas of difference in the language centers of the brain. Despite the plethora of research and no empirical evidence, the public persists in erroneously believing that dyslexia is a visual disorder of reading and that individuals who have dyslexia see letters and words backwards (Catts, 1989, 1993; Kamhi & Catts 2002, 2012; Lyon, Shaywitz, & Shaywitz 2003; Pugh & McCardle, 2011; Puranik, Petscher, Otabia, & Catts, 2008; Rimrodt & Cutting, 2007; Handler & Fierson, 2011). When children and adults struggle with their ability to decode (sound out) words, neuroimaging studies have demonstrated that the brain's activity is markedly different from the activities recorded in the brains of typically developing readers and proficient adult readers. The areas of difference involve areas of the brain that are critical for oral language. Therefore, it is commonly accepted that reading is a language activity, and successful reading depends upon

[1] International Dyslexia Association, Nov. 12, 2002, www.interdys.org

the integrity of the language centers in the left hemisphere of the brain.

The term pre-dyslexia tendencies is used in the legislation that enacted the Task Force. In 2016, the law was amended and requires the Task Force to define "**targeted students**." Throughout this document, targeted students will be referred to as: struggling readers and/or at-risk readers as students who are at risk for failure to achieve grade level reading competency (Mather, 2016). The terms, "at risk readers" or "struggling readers" typically refer to language-based learning problems noted in preschool and kindergarten that may be predictive of early reading difficulties associated with dyslexia. If there is a familial incidence of dyslexia or reading difficulty, these oral language and beginning reading skill difficulties may be viewed as characteristics that put the child at risk for dyslexia. (Catts, 1991; Catts & Hogan, 2003; Catts, Nielsen, Bridges, Bontempo, & Liu, 2013; Shafer & Rastegari, 2016).

The oral language difficulties that are often warning signs of future reading problems can be identified and assessed before a student enters kindergarten and particularly before first grade. However, when these oral language skills and familial history are not recognized before formal schooling begins, difficulties are later reported in the student's developmental history and in classroom observation. (Frijters, Lovett, Steinbach, Wolf, Sevcik, & Morris, 2011; Helland, 2016; Kamhi & Catts, 2012; Magnusson, & Naucler, 1990; Manis, F. R., Seidenberg, & Doi, 1999; Torgesen, 1998). Skill deficits are reported in scientific literature and are detailed in the comprehensive report.

These classroom difficulties follow children with dyslexia through the school years. Elementary school students, and even middle and high school students, identified as having difficulty acquiring grade level reading skills, often have foundational oral language difficulties and familial history as part of his/her developmental history. In middle school and high school, students with dyslexia may have learned how to decode (sound out words), but their reading often remains slow, dysfluent and inaccurate, which affects higher order comprehension. The dysfluency is secondary to an incomplete knowledge of or application of phonological awareness, phonemic awareness and phonics. In addition, difficulties with spelling and written language often persist. Children who struggle with dyslexia and low reading achievement or competency often demonstrate secondary behaviors that are associated with their academic difficulties.

Students are not prepared to be college and career ready when they struggle academically throughout their school career. The statistics for graduation rates in Maryland for the 2014-2015 school year for students who are classified with a specific learning disability (SLD) is 54.63%, based upon 4,457 students classified with SLD. Of those students, 42 or 0.94% graduated with a certificate, and 556 (12.47%) dropped out.[2] What the statistics do not tell us is how many of those students struggle with reading. In 2014-15, the number of children and youth ages 3–21 in the Maryland receiving special education services was 104,618, or about 11.9% of all

[2] http://archives.marylandpublicschools.org/MSDE/divisions/planningresultstest/doc/20152016Student/2015_sped_pub.pdf,

public-school students. Among students receiving special education services, 29% had learning disabilities.[3] It has been reported that 80% of students who are classified as having a specific learning disability receive that classification because of difficulties with reading (Lerner, 1989). The Task Force hopes this Report will play a role in improving the reading skills for all Maryland students, but particularly those subgroups who are identified with a SLD in reading.

RECOMMENDATIONS

The Task Force offers six overarching recommendations designed to implement a dyslexia education program and to improve reading instruction for all students. The recommendations listed below are expanded upon in the body of this Report.

1. ***Recognize dyslexia as a condition of Specific Learning Disability in all Maryland public schools, providing Maryland educators, parents, and the general public with evidence based, comprehensive resources to facilitate best practices in schools and systems for the identification, assessment, and intervention of dyslexia.***

Task Force surveys distributed to parents and teachers/education professionals, as well as public comments revealed that many Maryland public school Individual Education Program (IEP) teams do not identify dyslexia or use the term as a diagnostic descriptor for a reading disability. Using the diagnostic label, dyslexia, directs educators to understand the processing, academic and associated challenges experienced by the student who has dyslexia, which in turn drives effective structured literacy instructional approaches (see page 58 – 62).

The MSDE has issued a Technical Assistance Bulletin (TAB) on SLD, with a supplement that details how school systems should identify and address the students exhibiting characteristics associated with dyslexia, dysgraphia, and dyscalculia. The issuance of the supplement supports guidance released by the U.S. Department of Education on the use of the terms dyslexia, dysgraphia and dyscalculia in the form of a "Dear Colleague" letter on October 23, 2015. The Task Force commends MSDE for their policy guidance and considers this policy clarification the result of stakeholder collaboration with MSDE in the service of Maryland students.

2. ***Implement Universal Screening for all students, beginning in kindergarten, using a systems-based approach to screening, identification, and intervention for struggling readers.***

As a result of a review of scientific literature and information shared by local and national leaders

[3] http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf

in the field of reading and dyslexia, the Task Force recommends that a universal screening process for all students begin in kindergarten. For students who do not make adequate progress beyond grade three and through high school, similar screening and diagnostic protocols may be used to identify students struggling with reading.

The Task Force identified a screening and assessment protocol that would ensure all children who are at risk for reading failure are identified as early as possible, beginning in Kindergarten through grade 3, and in subsequent grades when students continue to show difficulty reaching reading proficiency. The recommended protocol includes:

- Universal screener for all students in grades K-3;
- Continuous progress monitoring;
- Informal assessment of oral language and reading with standardized diagnostic instruments;
- The screening of new children who enroll in a school; and
- Communication among all disciplines, including parents.

In addition, schools must identify students who have had a lack of exposure versus those students who struggle to learn. Students in kindergarten who have had no prior school experience, who do not speak English as a first or primary language, and/or who have had limited exposure to basic concepts (e.g., colors, letter names, letter sounds, number names, and their own first and last name) should be included in the initial screening process.

The scientific literature reports that family history plays a role in genetic disposition for reading difficulties. (Pugh & McCardle, 2011; Scerri, & Schulte-Körne, 2010; Shaywitz, 2003; Schumacher, Hoffmann, Schmäl, Schulte-Körne, & Nöthen, 2007). Family history of dyslexia and/or reading difficulties must be considered, through family interview at the initial stages of the screening and assessment process when screening for children at-risk for dyslexia. When family history is not considered, an opportunity for early identification and intervention is missed.

3. Use a multi-tiered system of supports (MTSS) for struggling readers, to support the development of grade level reading and include as one of the tools to support a child through the identification process for special education eligibility as appropriate.

Implementation of a tiered system that integrates a focus on the struggling reader can assist teachers of reading in providing evidence-based reading instruction and intervention needed to acquire grade level reading skills. A MTSS refers to practices that:

- Identify academic risks in a school setting before they lead to school failure;
- Engage a school-wide screening processes; and
- Implement intervention(s) and progress monitoring to measure academic progress.

Students who have been identified through an IEP as requiring specially designed instruction will

receive support provided throughout each tier, as appropriate. The Task Force offers an example of MTSS for reading instruction using a Structured Literacy approach.

- Tier 1
  - All students receive Structured Literacy instruction in the classroom
- Tier 2:
  - Supplementary intervention provided to students who receive Tier 1 instruction, but who demonstrate areas of weakness within the Tier 1 instruction
- Tier 3:
  - Targeted intervention provided to students who do not make progress with Tier 2 level of instruction
  - Students may present with low achievement, may not respond to instruction, or have been (or should be) evaluated to determine if they are eligible as a student with a disability under IDEA
  - This level of instruction would be adapted to address individual student needs through the systematic use of assessment data (which may include formal diagnostic data), to fine tune the use of the appropriate type of evidence-based intervention that have positive outcomes for students with dyslexia
  - Students at this level require intensive time and support to make progress toward grade level reading competency

This tiered system of instruction and supports is designed to prevent school failure and to reduce referrals to special education. Several states have implemented pilot projects that use a tiered system of supports with positive results. [4] [5] [6] [7] There are many helpful websites and on-line articles that explain a multi-tiered system of supports.[8]

4. Use a Structured Literacy approach for reading instruction for struggling readers including students who have dyslexia, as well as for all beginning readers in grades K-3.

Based upon research and practice, the Task Force agrees that a Structured Literacy approach to teaching foundational reading will result in better outcomes for reading instruction, will prevent low reading achievement, and has the potential to reduce referrals to special education for reading skill deficits. The Task Force recommends that a Structured Literacy approach

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[4] http://education.ohio.gov/Topics/Special-Education/Students-with-Disabilities/Specific-Learning-Disability/Dyslexia-Pilot-Project

[5] http://www.pattan.net/category/Resources/PaTTAN%20Publications/Browse/Single/?id=57f26e94150ba0b3558b4573

[6] http://www.slideshare.net/peavlerj/may-7-20832792

[7] http://www.rtinetwork.org/learn/what/approaches-to-rti; https://www.districtadministration.com/article/multi-tier-system-supports; http://www.edweek.org/ew/articles/2016/01/06/four-steps-to-implement-rti-correctly.html; http://www.rtinetwork.org/learn/research; http://www.rtinetwork.org/learn/research/progress-monitoring- within-a-rti-model); and Maryland's Response to Intervention Framework, http://files.eric.ed.gov/fulltext/ED502201.pdf

[8] http://www.literacyhow.com/our-impact/our-research/

to reading instruction prevents reading failure for targeted students with reading skills taught in a systematic, cumulative, explicit, and diagnostic manner. The key elements of this instructional approach include (Birsh, 2011): [9]

- Phonology, phonological awareness, and phonemic processing;
- Sound-symbol association;
- Syllable instruction;
- Morphology;
- Syntax; and
- Semantics.

Structured Literacy is a way to teach students the process of reading, over time, following a specific sequence of objectives, with continuous reinforcement and practice of skills previously taught and learned. For students who show characteristics of dyslexia and who do not meet grade level benchmarks, Structured Literacy instruction has demonstrated improved reading outcomes. (Alamprese, MacArthur, Price, & Knight, 2011; Ehri, Nunes, Stahl, & Willows, 2001; Hatcher, Hulme, & Snowling, 2004; Joshi, Dahlgren, & Boulware-Gooden, 2002; Nagy, Berninger, Abbott, Vaughan, & Vermeulen, 2003; Nagy, Berninger, & Abbott, 2006; Hatcher, Hulme, & Snowling, 2004; Wolf, Miller, & Donnelly, 2000). The Task Force is advocating that all students receive instruction in a Structured Literacy approach to reading, with increases in intensity and specificity of instruction applied to students who demonstrate deficits in reading skills (i.e., Tiers 2 and 3 in a multi-tiered system of supports framework).

5. Transform curricula and instructional strategies currently utilized in teacher preparation programs for reading at the undergraduate (pre-service), graduate levels of university preparation, as well as in professional development (in-service) training.

Research supports that teacher training is critical to the success of any intervention process or program implemented with struggling readers. The Task Force recommends that providers of undergraduate and graduate education review the content of their teacher training curricula and revise course content to include identification, assessment, and instruction for students who exhibit reading difficulties associated with dyslexia. The following recommendations support the transformation of curricula and instruction:

- Require a practicum with at-risk readers under the supervision of teachers experienced in targeted evidence-based practices;
- Training in targeted evidence-based practices;
- Require the reading instruction competency exam, Teaching Reading: Elementary Education (5203) be included in exams needed for teacher certification;

[9] (http://everyonereading.org/about/about-multisensory-structured-language-education/

- Include coaching as part of professional learning throughout the year to support teachers in the classroom. The support of school leadership is critical to the success of students and teachers; and
- Include all administrators and leadership in dyslexia knowledge and practice training to better support the teachers in their buildings.

"Just as children can't guess their way to reading," says Jim Barksdale, founder of The Barksdale Reading institute, "teachers can't guess their way to teaching."[10] To that end, the Task Force believes that the type, frequency, and quality of teacher training, both in undergraduate and graduate studies (pre-service) and job-embedded professional development (in-service), must be delivered by professionals who have specific credentials and experience relative to dyslexia and struggling readers. The curricula content should meet the highest level of evidence provided in the literature that addresses the entire scope of reading, for both typical development and for disorders of reading (Moats, 2009).

6. Implement a Pilot Dyslexia Education Program that includes students served (targeted students), teacher preparation, universal screening, program design, and use of a Structured Literacy approach to instruction, accommodations, fidelity measures and reporting.

The Task Force recommends a six-year Pilot Dyslexia Education Program.

The Task Force recommends the following considerations:

- Create a Pilot Advisory Board;
- Contract with a Principal Investigator;
- Select two school districts;
- Ensure demographics range from rural to inner city;
- Include a diverse population with respect to race, culture, language, and socio-economic background;
- Target students in kindergarten through second grade;
- Use a Structured Literacy approach to teaching reading to all students;
- Provide professional learning for teachers, administrators, and parents;
- Implement Universal Screening; and
- Institute program staffing and student groupings that are markedly different from current practices.

The Task Force envisions this Dyslexia Pilot Program to be a model instructional system for effective reading instruction for all students, and one from which students at risk for reading

[10] Retrieved September 25, 2016 from http://msreads.org/pre-service-reading-instruction

challenges and those subgroups and targeted students who typically struggle with grade-level reading achievement would benefit. The pilot program delineates the need to track student reading outcomes beyond second grade to demonstrate longitudinally, the effectiveness of a Structured Literacy approach to teaching reading.

SUMMARY

The Task Force is grateful to have had the honor to play a role in the potential transformation of the way in which Maryland's children are taught to read. For the individual, the ability to read is the pathway to a world of possibilities. For Maryland, supporting students' efforts to learn to read and a teacher's ability to provide effective instruction is a basic core value, not just for education, but for the overall quality of life for all residents. Maryland must strive to ensure all citizens are given the opportunity to learn to read well.

CURRENT PRACTICES IN MARYLAND

The Task Force believes that acknowledging and defining dyslexia to characterize the reading difficulties in some children leads to informed decision-making for instruction.

The Task Force created informal surveys to collect data about dyslexia perceptions, policies and practices in Maryland public schools.[11] Notably, teacher and parent feedback was somewhat contradictory on questions of teacher knowledge about dyslexia, but was also singularly uniform in acknowledging that public schools in Maryland do not identify dyslexia or use the term dyslexia in the school setting.

Parents and educators expressed concern that dyslexia is not acknowledged or identified as a type of specific learning disability in Maryland public schools. When reading difficulties are characterized by deficits aligned with dyslexia, scientific research has identified specific instructional methods and strategies that improve the reading skills in this population of learners. Currently, when students are identified as "struggling readers" or as having a "specific learning disability" (IDEA 2004), the roadmap for instruction and intervention is not targeted. Research shows that a "spray and pray" approach to helping struggling readers does not work -- implementing a little of this and a little of that with no systematic progression of skills to be taught (i.e., first teach this component, then the next component in an instructional sequence and system), does not result in improved reading for at risk readers (Connor, Piasta, Fishman, Glasney, Schatschneider, Crowe, ... & Morrison, 2009).

Public testimony and Task Force Survey results reveal that Maryland school district personnel do not consistently acknowledge that dyslexia is an educational condition, claiming it is a medical diagnosis or that the identification of dyslexia is not required by special education law. Secondly, some school personnel tell parents that they are not allowed to use the term dyslexia when describing reading difficulties exhibited by young and older students. Third, some school personnel continue to tell parents that a reading disorder either cannot be detected until the child is in third grade and exhibits a two-year gap in reading skills or that you cannot "test" for dyslexia before the child learns to read. Additionally, it appears that despite years of repeated, replicated research, teachers may not have been exposed to the theoretical foundations of dyslexia, as well as evidence-based instructional approaches that facilitate reading development in struggling readers whose profiles align with dyslexia characteristics.

[11] The Task Force surveys are informal; they do not meet the requirements of valid research surveys but were undertaken to provide the Task Force with feedback from parents, school based personnel including teachers and school superintendents.

Another finding from Task Force surveys and public comment is that students are expected to engage in instruction using materials often well above their reading level. The requirement of "access to grade level curriculum" may be misinterpreted, with regard to reading. When a student is in third grade and cannot read third grade material, access does not only mean having them attempt to read that level of print. Access also means providing reasonable and appropriate accommodations to enable a student to be successfully engaged in all grade level curriculum.

When teaching is child-centered, access should mean teaching students at the level they present to the teacher, and gradually building their skills through evidence-based practices so they can eventually read grade level material. That's not what happens in our classrooms across the state. Many teachers have also reported that they are not knowledgeable about dyslexia and the knowledge and practice that produce results in this population of learners.

Maryland system level superintendents also responded to an informal survey about struggling readers. Respondents all agreed that there were systems in place to identify and provide interventions to students who struggled with reading. All 14 districts reported that they use a multi-tiered system of supports and/or a Response to Intervention framework to provide leveled interventions to students. All districts reported using screening tools to identify and monitor progress of struggling readers. However, interventions for struggling readers are used inconsistently suggesting that more training and preparation on foundations of reading instruction for teachers, reading professionals, and building administrators is needed. The Task Force was pleased to see that school districts appeared to be implementing programs that meet the needs of struggling readers, but the national (National Assessment for Educational Progress[12]), state and local outcome data (PARCC results), as well as public testimony at the Task Force proceedings and informal Task Force survey data did not indicate that these programs or initiatives were yielding the anticipated outcomes.

The variability of processes and procedures from system to system that impact at-risk students is concerning -- early identification and intervention is critical for student success, particularly for students in poverty, students who are English learners, and students who are at risk for reading disabilities. The Task Force was disappointed to learn that despite scientific research support for the use of evidence-based (universal) screeners coupled with explicit and systematic instruction in foundational reading skills (structured literacy) and early intervention to prevent and remediate reading difficulties in young children, school districts did not appear to have a unified (within a system) approach to identification and intervention for struggling readers.

[12] https://nces.ed.gov/nationsreportcard/

SURVEY DATA

ABBREVIATED SURVEY DATA

PARENT SURVEY (Maryland parents): 225 respondents

- More than 50% of parents report that evaluators of reading never mentioned the child may have dyslexia
- More than 50% of parents report a familial history of dyslexia
- More than 50 % of the students who are receiving services of any kind are in elementary-school
- Parents report that either an outside evaluation or their own observation was the primary way they realized their child was exhibiting a reading difficulty; less than 20% responded that the child's schools agreed a reading difficulty was evident.
- 80% of parents report that schools do not understand dyslexia
- Fewer than 50% of schools screen for reading skills, only 15% of that screening occurs in kindergarten
- 44% of parents shared they were concerned about their child's reading in kindergarten
- 50% say it takes more than a year for some type of assistance related to their student's reading difficulties
- Per parental report, almost 50% of teachers have never had training in dyslexia
- 38% of students are classified as Specific Learning Disability (out of 225 responses). Of the 38%, only 8% of schools identified dyslexia as the cause of the reading disability.
- Per parental report, fewer than 40% of schools use evidence-based, instructional practices to teach students to read.
- Most instruction to address reading difficulties happens inside the general education classroom.
- 50% of students receive only 30 minutes per day to address their reading weaknesses by either a special educator or paraprofessional.
- Per parental report, monitoring of progress is through benchmark or standardized testing.

TEACHER (PROFESSIONAL) SURVEY (teachers, reading specialists, instructional resource teachers): 126 Respondents

72% of responses stated no special professional development is offered to teachers on the topic of dyslexia or how to work these students.

- 61% were from reading specialists in a public school, elementary level.
- 82% report that they know when a reading problem presents as dyslexia.
- 30% say they learned about dyslexia in college, 20% say through literature, 13% through professional development.
- When asked "Is the term dyslexia specifically used in your school to describe children who struggle with reading decoding (i.e., sounding out the words?)," 80% said "No".
- 41% report that they use targeted interventions designed for students who are at risk for, or struggle with, reading decoding/dyslexia in kindergarten.
- 22% of respondents reported that their schools "don't screen for early warning signs of reading difficulty".
- 41% of respondents say that their schools wait until first to third grades before implementing an individual, academic assessment for a reading problem.
- 29% say their screeners don't test for early warning signs of dyslexia while another 20% didn't know.
- 50% report that they intervene at grade K, and 35% intervene in grades 1-3
- 30% say Response to Intervention (RtI) is used to give a targeted, intensive program to students who struggle to read, while 32% report that they do not use RtI for this purpose
- 54% say reading interventions are delivered in the general education classroom.
- 52% say their schools intervene early.
- 32% say it takes between 8 weeks and 15% report 12 weeks to move between tiers in Response to Intervention (RtI).
- Progress is monitored by: 30% teacher made probe, 17% classroom based measurement (CBM) or paper/pencil test, 28% running records and 21% use a standardized assessment
- Only 15% said the instructional approach looks different when using RtI, with most respondents reporting that the difference is more time spent on the same class work, with instruction provided by a paraprofessional, special educator, or reading specialist.
- 30% of respondents reported special education services provide students with different instruction, that is provided by a special education teacher. Others reported that their schools provide instruction by a speech language pathologist (4%), co-teaching support (18%), and/or instruction is more intensive (18%).

What the scientific research reveals about teacher knowledge about dyslexia

Washburn, Mulcahy, Joshi, and Binks-Cantrell (2016) reviewed research conducted to assess teacher knowledge about dyslexia and conducted their own survey. They reported that a study conducted by Allingon in 1982 revealed that most teachers believed visual perception was the main reason children had difficulty acquiring basic reading skills. They also reported results obtained from Wadlington and Wadlinton (2005) from their Dyslexia Belief Index survey instrument. The majority of respondents believed that word reversal is the main criterion for diagnosing the presence of dyslexia. In 2010, Ness and Southall also reported that 30% of preservice teachers believed that dyslexia was a reading disability and 74% believed that letter reversal was the "hallmark characteristic of dyslexia." Washburn, et al (2014) conducted a survey among preservice teachers to determine the current status of knowledge relative to dyslexia. Teachers believed that colored overlays or tinted glasses and eye-tracking exercises could be helpful in remediating dyslexia and that children can outgrow dyslexia. Both beliefs are erroneous. And, alarmingly, 97% of their sample responded that letter reversal is the main marker of dyslexia. [13]

The Task Force informal surveys did not ask the same questions, but the responses help explain why Maryland's students who struggle with reading in a way that aligns with the characteristics of dyslexia continue to demonstrate reduced reading achievement and why parents continue to be concerned with how their struggling reader is instructed.

SUPERINTENDENT'S SURVEY[14] (answered by Superintendents, Deputy Assistant Superintendents, Supervisors and Directors)

The Task Force surveyed Maryland school district superintendents with 14 of 24 districts responding to questions about how reading difficulties and struggling readers are identified, screened and remediated. The term dyslexia was not used in the superintendent informal survey so it is unclear what if anything, school based leadership and administration know or perceive about dyslexia specifically. Rather, superintendents responded to the term "struggling readers" to capture the ways in which their districts are addressing reading instruction for students who evidence low reading achievement.

[13] The reader is directed to the all 2016 Edition of *Perspectives on Language and Literacy*, a quarterly publication of the International Dyslexia Association. The issue is dedicated to teacher training and knowledge about dyslexia.

[14] The survey was sent to all superintendents to gather information about current practices in the state of Maryland relative to the screening of students for reading difficulties and intervention for struggling readers in November 2015 -- 14 Superintendents of 24, responded.

The short-answer survey was circulated among superintendents through the Public School Superintendent Association of Maryland (PSSAM). The questionnaire is included as an appendix to this Report and can be found on www.Livebinders.com. This type of informal instrument was designed and circulated instead of a traditional survey because it was believed that there would be a wide variety of responses not able to be captured by a forced-choice survey. The Task Force anticipated that responses would be difficult to analyze in a way to reach cohesive conclusions, but agreed that even if the data were collected, it would represent the ways in which top level administrators understood how their counties were addressing the needs of struggling readers.

Summary

Parent concerns were evident from the survey results and from testimony provided at the Task Force public meetings. Teacher responses confirm that dyslexia has not been a term used in school settings, and that they do not have extensive university training or professional development experiences that can build their knowledge and practice base for working with students who have dyslexia. Teacher responses did not overwhelming indicate that students with dyslexia receive specialized reading instruction that was intensive. Many respondents reported that reading screening instruments were not administered for early identification of reading difficulties. Superintendent responses indicate that programs and processes are in place to support struggling readers. Yet, despite the positive responses on the teacher survey and the reported reading programs used at the Local Education Agency (LEA) level, students continue to struggle and parents continue to be concerned and dissatisfied with their children's progress in reading.

A review of PARCC data tells a story about how well Maryland's students can read. Fourth grade 2015 data reveals that 33.1% of students met expectations, and 4.4% exceeded expectations, meaning that 37.5% read at least on grade level.[15] The National Assessment of

[15] http://reportcard.msde.maryland.gov/ParccResults.aspx?PV=71:3:99:AAAA:1:N:0:13:1:1:0:1:1:2:3

Educational Progress (NAEP[16]) data revealed that 36% of our nation's students were "at or above" proficiency in reading. The percentage of students in Maryland who performed at or above the NAEP Proficient level was 37% in 2015. This percentage was smaller than that in 2013 (45%) and was greater than that in 1998 (27%). When we think about the incidence of dyslexia in the general population as ranging from 8% to 17% (Shaywitz, 2003), with 10% as an average (NICHD), we can compute that anywhere from 6, 775.8 to 11,519 students could be identified as having dyslexia, based upon a total student population of 67,758 (in 2015).

What can be done to improve reading for students with dyslexia and, as a benefit for all students?

The Task Force chose to focus their recommendations to improve reading outcomes for struggling readers and all Maryland's students on the following strategies:

- Defining dyslexia, because in doing so, we can identify when it occurs, direct diagnostic efforts to uncovering the specific characteristics, and only then can appropriate and effective programming decisions be made based upon the data.
- Recommending changes to teacher training at the university and professional development levels.
- Defining best practices for early identification and intervention.
- Recommending Universal Screening for phonological awareness, print readiness, and reading beginning in kindergarten.
- Recommending using a Structured Literacy approach to reading instruction for all students in the early grades, and for all students who struggle with reading, especially if their learning profile aligns with the characteristics of dyslexia.
- Recommending a multi-tiered system of supports for reading that includes ongoing diligent progress monitoring.
- Designing a Pilot Dyslexia Education Program that incorporates teacher training, utilizing a universal screener, implementing homogeneous instructional groupings for reading across each grade level within a school, implementing a multi-tiered system of supports and progress monitoring, and providing parent training and including parents in the decision-making process.

The Task Force would like to note that the Task Force recommendations reflect a deep respect for Maryland teachers and school personnel – the Task Force membership included three current teachers, one former Maryland teacher, and one district Superintendent. The Task Force recognizes the need for political, governmental, state, district, and building level support to ensure all students receive early and effective reading instruction.

16 http://www.nationsreportcard.gov/

CURRENT PRACTICES FOR DYSLEXIA IN OTHER STATES:

Since 2012, more than 30 states enacted dyslexia-specific legislation in response to poor reading performance and parent/teacher testimony that existing reading instruction was not effective for certain populations and students with dyslexia.[17] Not all students who fail to meet reading, writing, and spelling benchmarks or who show early signs of reading difficulties have dyslexia. However, research shows that at-risk readers, including students from low socio-economic backgrounds, English learners, and students with language learning disabilities, and dyslexia benefit from early identification and effective, evidence based instruction in the foundational reading skills of phonology, sound symbol association, syllables, morphology, syntax and semantic. Effective instruction is taught by a knowledgeable and well prepared teacher in a systematic and cumulative, explicit, and diagnostic manner.

In 2015 states enacted 17 bills related directly to dyslexia and in 2016, 12+ states introduced legislation with 9 states enacting legislation thus far. 38 states have one or more dyslexia laws while 19 states have comprehensive dyslexia laws that mandate early dyslexia screening and intervention, teacher training (undergraduate and professional development), a definition of dyslexia, and accommodations for dyslexia.

OVERVIEW OF DYSLEXIA LEGISLATION ENACTED IN THE UNITED STATES[18]

1. Certification/Assessment requirements in foundational reading: 16
2. Definition of dyslexia: 22
3. Dyslexia Handbook/DOE Guidance on Dyslexia: 13+
4. Dyslexia task force & reports/commissions/advisories: 17
5. Early screening and identification of dyslexia: 17 states
6. Higher education, teacher training requirements: 13
7. In-service professional development requirements on dyslexia: 21
8. Intervention requirements for structured literacy: 17
9. Pilot programs: 9
10. Comprehensive dyslexia legislation: 19

[17] Dyslexia Task Force Legislative Compendium

[18] Task Force Report on the Implementation of a Dyslexia Education Task Force, Report on Identification and Treatment of Dyslexia in Other States and Decoding Dyslexia US, Dyslexia State Action Summary, 2016,

Components & Costs of Successful Dyslexia Education Programs (Pilots) in Other States

The dyslexia education pilot programs detailed herein show promise with results that demonstrate improved reading competence and fewer special education referrals and outside placements. This report is not all inclusive -- there are successful public and private dyslexia charter and magnet schools in Pennsylvania, Florida, and Mississippi to name a few. There are also a number of well-designed dyslexia pilots just that have not yet reported results -- they are included here to demonstrate the academic and financial structure of the pilots.

State pilots reviewed in this report include:

1. Derby County, Kansas
2. Ohio
3. Pennsylvania
4. Mississippi
5. Washington
6. South Dakota
7. Indianapolis, Indiana
8. Connecticut
9. Utah

Dyslexia Pilot, Kansas: Derby County School District

Contact: Dr. Charlene Laramore, Site Administrator, Asst. Supt., Curriculum and Instruction, Derby Public Schools, Ph: 316-788-8434.

Sandra Thompson: Language Foundations author/trainer

Intervention Programs: Take Flight and Language Foundations

Language Foundations, also known as Structured Language Basics is an Orton Gillingham-based multisensory approach to teach reading language arts in an inclusive classroom. Teachers deliver scripted curriculum of 125 multisensory lessons that provide instruction in all the areas of language - both programs are considered to be "structured literacy" programs. Language Foundations is a Tier I (classroom) and Tier II, small group structured literacy intervention. Take Flight is a Tier III program for students with dyslexia and severe reading problems.

Teacher Preparation

Tier I: Regular Classroom: 30 hour training for classroom teachers.

- Assessment every 15 lessons for tracking; scripted;
- follow up with mentoring, classroom visits to ensure fidelity; lesson videotapes for quality assurance

Tier II: Tier II, Small Group: same 30 hour training for instructional resource teachers, special education teachers, reading specialists and other teachers. The intervention is pull-out, small group, homogenous, students.

Tier III -- for kids who have dyslexia or who need the full specialized therapy training, this pilot uses the program Take Flight, which is used in Scottish Rite Hospitals in Dallas. This program is a combination of the Orton Gillingham (OG) approach combined with speech pathology methods similar to Lindamood-Bell's Lindamood Phoneme Sequenceing (LiPs) program. The combination helps remediate spelling, language, word, reading, and writing difficulties.

- Teachers who teach this program require the 2 year therapy training in OG.
- She would be happy to speak with folks in MD to share her experience.

Introductory Course Requirements

- Participate in 2 week summer training June 4 - 15, 2012
- Attend 4 seminars during the 2012-2013 school year (release time provided by district)
- Work with individual/small group throughout the year
- Complete 5 demonstration lessons
- Log 350 practicum hours

- Complete competency assignments

Advanced Course Requirements

- Participate in a two week summer training July 23 - August 3, 2012
- Attend 3 full day seminars during the 2012-2013 school year (release time provided by district)
- Work with individual small groups throughout the year
- Complete 5 demonstration lessons
- Log 350 additional practicum hours
- Complete competency assignments

Classroom Instruction Model Description:

- Dr. Laramore organized the district-wide implementation of Language Foundations reading program for all teachers K-5 in all elementary schools in the Derby County School District.
- They train up to 5th grade because they have so many EL students and military families who are transient.
- Students reached would include Tier I and II -- whole classroom and small groups of students who need more intensive instruction.
- There are Tier III Take Flight (therapy level) specialists in middle school and high school to work with kids who are far behind.
- Time in the Program: some students may have had a full year of Language Foundations and still require more intensive training.
- The School Board is so pleased they now want her to speak with higher education to bring more training for pre-service teachers in Kansas.
- Data Collection: She is working with an evaluation team from Harvard that will track some outcomes for at-risk students. This data will be available next year (2017)

Dyslexia Pilot, Ohio

Dyslexia Pilot, Years One - Three, Report, December 2015

Plan for Implementation and Evaluation

Goal: To demonstrate and evaluate the effectiveness of early screening and reading assistance programs for children at risk for reading failure including those students exhibiting risk factors associated with dyslexia and to evaluate whether effective early screening and reading assistance programs could reduce future special education costs.

Requirements: Screen students for reading difficulties, provide early intervention and progress monitoring, and provide professional development in evidence based reading instruction and multi-sensory structured language instruction to teachers (general education and intervention specialists) serving students in kindergarten through second grade. *The pilot must include a methodology for evaluating the reading program's effects on the children's identified risk factors.* The pilot also required a 3 year commitment with a contract from participating school districts.

Targeted Students: Low English Proficiency, Students with Disabilities, Low Socioeconomic Status in grades K-2

Screening: DIBELs next administered in 5 of 6 schools using 3 measurement occasions. It was used for screening, diagnostic planning and progress monitoring. The other school used DIEBELs but did not follow protocol.

Number of School Districts: 6

Parent Component: yes, required to notify parents about eligibility in the pilot, obtain consent and provide information and resources on dyslexia and reading difficulties and possible services under state and federal law (IDEA).

Educator Preparation: House Bill 157 provides that schools can contract with educational service centers statewide to provide training in evidence-based reading instruction and multisensory structured language instruction. Ohio local educational service center.

Results: All of the participating school districts that met the requirements for the Dyslexia Pilot Project in Year 3, demonstrated meaningful gains in student rates of improvement in Year 3 that will likely be sustained with the initial Pilot Project investment. Over time, all of the school districts will have cost savings that exceed the initial investment. Some school districts will reach that point sooner than others (p. 6, Ohio Dyslexia Pilot Project Report to the Legislature, Year 3).

Length of participation: 3 years

Funding: Each participating school district funds the pilots out of current funding streams and applies for grants as needed.

IMPORTANT KEYS IN OHIO:

- Personnel at the Ohio Dept. of Education are passionate about dyslexia education reform.
- Pilot Program works only if principal supports 100%
- Also must involve effective use of Response to Intervention
- Must have highly trained specialist available to work with Tier III students

Teacher Training

- **Training Network:** Ohio has a network of Educational Service Centers that

provide in-service professional development to educators. Ohio law gives these services centers and other educational institutions permission to hire a dyslexia specialist to provide professional development in the area of dyslexia for Ohio teachers and administrators. A dyslexia specialist is someone who has achieved training consistent with the Level II IDA Knowledge and Practice Standards.

- **Levels of Training**
  - Tier I: General Education Classroom: 30-hour OG training
  - Tier II: Small group intervention - Teaching Level Practitioner
  - Tier III: Therapy Level - one at every school
  - Professional Development provided by Mayerson Academy -- Trained 11 elementary teachers grades K-2 in an Orton-Gillingham Multisensory Reading course coupled with a Practicum (including 14 onsite coaching occasions) provided by the Mayerson Academy in coordination with Mt. St. Joseph University's Science of Reading Partnership Program. Contact: Mt. St. Joe: Amy Murdoch

- Cost Savings Analysis, Table 9, p. 25, Report extracted from World Wide Web: https://education.ohio.gov/getattachment/Topics/Special-Education/Students-with-Disabilities/Specific-Learning-Disability/Dyslexia-Pilot-Project/DPP-Year-3-Evaluation-and-Final-Report.pdf.aspx

Table 9. Projected Cost Savings of Precluding the Need for Intensive, Individualized Interventions for Students Exceeding the Expected Rate of Improvement with Strategic Interventions (i.e., the Difference in Costs Between Tier II and Tier III Interventions).

	Number and Percentage of Students with a Measureable Reduction of Reading Failure Risk at Tier II		Costs Savings (in Teacher Time) of Tier III Interventions Not Incurred
Cincinnati Public Schools			
Kindergarten	15	93.8%	$16,922.25
Grade 1	67	72.8%	$75,586.05
Grade 2	8	47.1%	$9,025.20
			$101.533.50
Edison Local Schools			
Kindergarten	7	100%	$10,857.00
Grade 1	21	100%	$32,571.00
Grade 2	12	80.0%	$18,612.00
			$62,040.00
Indian Creek Local Schools			
Kindergarten	18	85.7%	$23,078.88
Grade 1	58	74.4%	$74,365.28
Grade 2	28	66.7%	$35,900.48
			$133,344.64
Shawnee Local Schools			
Kindergarten	10	100%	$4,372.88
Grade 1	26	83.9%	$11,369.48
Grade 2	13	68.4%	$5,684.74
			$21,427.09
Trimble Local Schools			
Kindergarten	4	100%	$2,803.20
Grade 1	10	62.5%	$7,008.00
Grade 2	1	10.0%	$700.80
			$10,512.00

Resources:

Plan to Implement and Evaluate the Dyslexia Pilot Project in Ohio

Graduate Certificate Programs in Dyslexia

Department of Education Resources on Dyslexia Pilots

Reading Foundations Exam

Contact in State: Bonnie S. Nelson

Education Program Specialist

Office for Exceptional Children

Supports & Services for Diverse Learners

25 South Front Street, MS 409 | Columbus, Ohio 43215-4183

(614) 752-1245 | (877) 644-6338 | (614) 466-2650

Bonnie.Nelson@education.ohio.gov

Contact: Rebecca Tolson: Ohio International Dyslexia Association

Contact in Cincinnati: Sonia Milrod, Professional Development Specialist:
milrod.sonia@mayersonacademy.org

Dyslexia Pilot, Pennsylvania

Dyslexia Screening and Early Literacy Intervention Pilot Program

CONTACTS:

Lynn Dell lydell@pa.gov -- PA Department of Education (DOE)

Diane Reott, PA Dyslexia Literacy Coalition and PBIDA (PA Branch of the IDA)
dreott55@gmail.com
Daphne Uliana, PA Dyslexia Literacy Coalition and PBIDA (PA Branch of the IDA)
daphneuliana@gmail.com

Monica McHale-Small: Superintendent monica.mchale-small@gmail.com

Pennsylvania Dyslexia Literacy Coalition

Advisory Group

Act 69 of 2014 was signed into law in Pennsylvania on June 26, 2014.This act was initiated through the efforts of a coalition of parents and literacy groups concerned that students with dyslexia were not receiving appropriate instruction in public schools. Once the law was passed, the PA DOE created the Advisory Group to help implement the law and included members of the Dyslexia Coalition. The advisory group is collaborative and each member is a "working member" meaning that as a member you must help with implementation tasks.

Requirements **of Pennsylvania Pilot**

1. Evidence-based core reading program for all students.
2. Evidence based screener to identify students with risk factors for reading, given three times a year. Screener must screen: Phonological awareness, Alphabetic knowledge, Concept of word, Grapheme/phoneme correspondence. *NOTE: If you are going to identify students, the specialized instruction needs to be ready and teachers trained to provide diagnostic and prescriptive structured literacy programs.*
3. Intervention Measures: the act defines the intervention and what it must contain including multisensory structured language programs for students scoring below the benchmark, delivered with fidelity by a trained interventionist that provides a structured literacy program meeting listed criteria.
4. Trained Teachers and Programs: see chart below for detail
    a. Intervention is provided by 72 trained interventionists
        1. 50 trained in Orton-Gillingham (OG) MSL
        2. The other 22 trained in interventions including Sonday, Wilson, Lindamood Bell
5. Diagnostic Assessments for students scoring below the benchmark that would assess reading components such as phonological awareness, alphabetic knowledge, concept of word, and grapheme/phoneme correspondence.

6. Parental Notification required
7. Number of Participating Districts: 8 districts with 21 participating elementary schools. The Act called for three (3) districts between 3,000 and 15,000 students but since more than 60% of the districts are fewer than 3,000 students, the DOE provided an opportunity for smaller districts to participate.
8. Two levels of supports:
   - Classroom component, which enhances core instruction for all students focused on phonemic awareness and multisensory structured language (MSL/Structured Literacy), and
   - Intervention component, MSL intervention for students to provide intensive additional instruction.
9. Legislative Funding Requirements: Act 69 requires: "Funds.--The department shall apply for Federal, private and other non-State funds and shall use funds appropriated or otherwise made available to it for the pilot program." The PA DOE funds the pilots.
10. Funding Sources and Amounts: $60,000 per large district, $40,000 for smaller districts toward professional development. The PA DOE funds the pilot programs out of special education monies. Each of the eight (8) school districts received a $40,000 grant for pilot implementation, but the larger ones received $60,000 after the first year because of additional substitute costs.
11. Points of Interest/Learning from Experience:
    - Communicate the value and expected outcomes of the pilot to help gain support from those who doubt the effort
    - Ensure that you plan for personnel turnover by building in some requirements to keep teachers in place. Training is expensive and personnel loss creates problems.
    - Require commitment from building principals and personnel or the effort will fail
    - Mandate structured literacy in authorizing legislation so that school districts can refer to "the law" when determining whether or not a program meets requirements.
    - Ensure that higher education provides teacher training so that there is a supply of appropriately trained, effective teachers.
    - Program success means that more teachers will want the training so plan for expansion
    - Ensure training hours are sustainable and reasonable
    - Although it will take at least 3 years to demonstrate the best efficacy, other schools/districts will copy the program to serve students who struggle to read
    - Ensure core instruction is structured literacy
    - The Philadelphia school superintendent, formerly from PG county, has a written commitment to hiring only teachers with a structured literacy credential in his district
    - If schools offer structured literacy in regular education, whole class and in Tier II Response to Intervention, the need for Tier III interventions/Special education would be reduced.
    - Pilot implementer must be flexible for with school district participants -- each district has its own culture.

12. Data Collection/Results: PA contracts with AIR, American Institutes for Research for data collection, evaluation, and ensures the pilot is replicable and has efficacy. Staff at Haskins Laboratories provides ongoing support in the evaluation and implementation.
13. Length: Three years, began 2015-16 school year
14. Parent Liaison at each pilot site to facilitate communication, liaise with other parent representatives and provide assistance to parents in explaining the pilot and services for children.

Teacher Training Efforts

- See chart below for details on the intervention training from Compass/Children's Dyslexia Center-- 3 cohorts beginning in 2015 through 2018. The proposal was requested by the PA DOE "This approach allows for continued growth with fidelity. Once some of these teachers become Supervisors and have experience in the field, they are eligible to become qualified Trainers so that internal capacity can be sustained without the need for outside trainers. There is potential that there will be fewer Supervisory level teachers trained because many student needs can be met with the Intermediate level training.
- College graduate credit is available for core classroom teachers and interventionists if they choose.
- PA is working to improve the rigor of teacher preparation programs in universities across the state, by promoting the adoption of the IDA Knowledge and Practice Standards for Teachers of Reading in PA state standards.
- Teachers incrementally improve their knowledge of foundational reading through cohort-based, annual training to allow scheduling flexibility.

Compass Reading Center Certification and Sustaining Training Program

3 Year 2015-2018 Training Plan	2015-2016 CRC Trainees Cohort 1--(48) Initial	2016-2017 CRC Trainees Cohort 1--(24) Intermediate Cohort 2--(24) Initial	2017-2018 CRC Trainees Cohort 1 (12) Supervisor Training Cohort 2--(12) Intermediate Cohort 3--(24) Initial

Requirements For Schools	School Support Form Contract w/CRC Support materials	School Support Form Support materials For Cohort 2 trainees	School Support Form for Cohort 3 trainees Support materials
Applicant Requirements	Application, Recommendation from school Principal	CRC Certification, Pass Alliance Exam, become member of ALTA Practitioner Level Application, Proof of BA, 2 letters of Recommendation	Supervisor Training, CRC Director Recommendation Supervisor Application Certified at Teaching Level, Advanced Level Application for Intermediate Training Application, Proof of BA, 2 letters of Recommendation
Course Work	50 hours Quizzes, 3 book reports, chapter reviews (Birsh book), final 5 observed model lessons (live or video)	15 hours 50 hours	36 hours Supervisor 15 hours 50 hours
Minimum Practicum/ Internship	100 hrs (50 – 60 minutes) K-4 Schools choose 2nd- 3rd Children K-5/K-6 choose 2nd - 4th grade Appropriate setting	Continue with children in upper levels, additional 100 hours	200 hours - experience in beginning/upper levels of instruction

	for one-on-one Instruction		
Observations	**10 (direct/video)**	**2 (direct or video)** **10 (direct/video)**	**2 (direct or video)** **10 (direct/video)**
Minimum Period	**9 months**	**9 months**	**12 months**
ACT 48	**180 hours**	**15 hours**	**36 hours**

Provided by PA Department of Education, October 2016

School Districts Participating in Dyslexia Pilot (there are other dyslexia charters in PA including the most recently established program for Pittsburgh):

1. Bentworth School District
2. Blue Mountain School District
3. Crawford Central School District
4. Delaware Valley School District
5. Ellwood City Area School District
6. Governor Mifflin School District
7. Millcreek Township School District
8. Pen Argyl Area School District

PA Pilot Resources/Links:
Pennsylvania Branch International Dyslexia Association Presentation, Oct. 2016

Pennsylvania Department of Education, Dyslexia Pilots

Pilot Dyslexia Education Program Guidelines

PA Dyslexia Pilot Parent Page

Dyslexia Pilot, Mississippi

Mississippi has a comprehensive dyslexia law that encompasses screening, intervention, teacher training and the laws are funded through state budget allocations. Before these comprehensive laws were enacted over the last decade, Mississippi had instituted a Pilot Dyslexia Education Program that was funded from FY 1997-FY 2006 and was reintroduced and was "reauthorized" in 2007. The pilot programs established a successful basis for the comprehensive dyslexia screening, intervention and teacher professional development models in Mississippi. Currently, the state is assessing its education coursework for teachers to see if there are changes that can be made to benefit teaching and learning for students who struggle to read, write and spell and those with dyslexia.

Teacher Training: Administrators and teachers across the state received training from the Mississippi Dept. of Education (MDE).

Identification: Model provided by MDE

Data Collection: Various evaluation tools

Funding:

2000: $260,000 granted to LEA applicants; 22 school districts were granted funds from $5,000-$16,000

2001: $290,000

2002: $252, 587

2003: $239,958

2004: $239,914

Approved Interventions: Texas Scottish Rite Hospital Dyslexia Training Program; Earobics; FastForWord; Barton Reading and Spelling; Academic Language Therapist Instruction

Results: 738 students with characteristics of dyslexia were identified. Of this number, 507 were placed in dyslexia programs. Due to withdrawals and absences, 405 students were assessed using pretests and posttests. Of the 405, 376 students showed improvement while 29 students showed no change. Schools report better relationships with parents because they feel their child's needs are being met.

Recommendations: 1) Identify students early who exhibit characteristics of dyslexia using screening tools 2) Professional development for teachers and administrators statewide regarding screening and intervention and the use of Best Practices in the classroom 3) Implement Orton

Gillingham based approach to teaching reading for all students identified with characteristics of dyslexia

Request for Additional Funding:

- $20,000 Dyslexia Conference
- 1.5K to develop a screening instrument (Mississippi Screener)
- $600,000 for professional development related to screening
- $10,000 to develop a Professional Development on the Dyslexia Handbook
- $600,000 for professional development on the dyslexia handbook
- $270,000 increased funding for Pilot Dyslexia Education Programs

TOTAL: $3 million

Source: 2006 Report to the Mississippi Legislature on the Pilot Dyslexia Programs, Hank M. Bounds, Ph.D., State Superintendent of Education

HB 1031 Guidance for Public and Non-Public Schools 2015-2016

HB 1031 School Verification and Assurances 2016-2017

HB 1031 Student Dyslexia Scholarship Application 2016-2017

Technical assistance is available in the following areas:

- Professional Development
- Mississippi Dyslexia Handbook
- Current, scientifically-based information regarding dyslexia
- Answers to questions and concerns by phone and email

MISSISSIPPI DEPARTMENT OF EDUCATION

P.O. Box 771 | Jackson, MS | 39205-0771

Tel 601-359-2586 | Fax 601-359-2040

www.mde.k12.ms.us

Twitter: @MissDeptEd

Source: World Wide Web, www.mde.k12.ms.us

Dyslexia Pilot, Washington State

Washington - SB 6016 (2009) - Funds five pilot projects to implement research-based, multisensory literacy intervention for students with dyslexia. Participating schools must have:

- *a three-tiered reading structure in place,*
- *provide professional development training to teachers,*
- *assess students, and*
- *collect and maintain data on student progress*

Pilot Outcomes

Outcomes: The report found that 40 percent of the students who received services through the pilots met standard on the reading component of the Washington Assessment of Student Learning (WASL), whereas only 17 percent of the same students had met standards on the reading WASL in 2007. The report included recommendations to provide statewide support and to develop a dyslexia handbook.

Resources:
Lorraine Wojahn Dyslexia Pilot Reading Program Report to the Legislature January 2009

Lorraine Wojahn Dyslexia Pilot Project Update January 2007

Lorraine Wojahn Dyslexia Reading Pilot Legislative Summary January 2006

Washington State DOE Dyslexia Pilot Information Page

Informal Notes from Decoding Dyslexia Washington

- 1 resource person per district was funded
- Used LMB, Wilson -- amazing results
- Budget problems in the state precluded the pilot from further funding and parents report that they have few options in the state for dyslexia remediation other than paying out of pocket.

Brandon Valley School District, Sioux Falls, SD

Contacts:

Susan Foster, Principal at Fred Assam Elementary School Susan.foster@k12.sd.us

Tanya Palmer, Principal/Reading Specialist at Valley Springs Elementary School
Tanya.palmer@k12.sd.us

Sue Hegland, Board of Directors for the International Dyslexia Association, Upper Midwest Branch and member of the Board of Education for the Brandon Valley School District
sue.hegland@k12.sd.us

Number of School Districts: One school district

Participating Schools: Fred Assam Elementary School and Valley Springs Elementary School

Period of Time Using Walk to Read RtI process: The 2016-2017 school year is the third year using this process

Goal: Enhance school's RtI process to help struggling students improve, and close the gap

Targeted Students: All students are screened at the beginning and the end of each academic year. The screening is used to place students in homogeneous reading groups. Students who are classified in the strategic and intensive reading groups receive small group, push-in reading interventions.

Screening Process and Screener/s:

Kindergarten - end of Year	**First grade - beginning of year**
DIBELS Next	DIBELS Next
Qualitative Reading Inventory – 4	Developmental Reading Assessment
CORE Phonics Screener	CORE Phonics Screener
Star Early Literacy Assessment	Star Early Literacy Assessment

Second grade - beginning of Year	Third grade - beginning of year
DIBELS Next	DIBELS Next
CORE Phonics Screener	CORE Phonics Screener
Star Early Literacy Assessment	Star Early Literacy Assessment

English Language Arts Instruction:

Students participate in whole class phonics instruction for phonics instruction using a South Dakota developed program called VOWAC (Vowel Oriented Word Attack Course) or phonics instruction through the reading basal. (30 minutes)

Then students divide into four homogenous class groups for whole group core instruction (30 minutes) and small group instruction (60 minutes). These groups are fluid and change as students progress.

Above Benchmark Group (approximately 25 students)

Staffing: 1 classroom teacher

Curriculum: Reading Street

Daily 5 rotations with small group instruction

During small group instruction, students work independently while classroom teacher pulls students for small group instruction.

Benchmark Group (approximately 25 students)

Staffing: 1 classroom teacher

1 educational assistant

Curriculum: Reading Street

Daily 5 rotations with small group instruction

During small group instruction, educational assistant helps students work independently, while classroom teacher pulls students for small group instruction.

Strategic Group (approximately 18 students)

Staffing: 1 classroom teacher

1 (or 2) Title I teacher(s)

1 educational assistant

Curriculum: Reading Street

S.P.I.R.E. (Specialized Program Individualizing Reading Excellence) (Orton-Gillingham based small group or one-on-one tier II or III reading program)

During small group instruction, four groups of students rotate teachers. They receive 30 minutes of small group instruction in the Reading Street curriculum and 30 minutes in the S.P.I.R.E. curriculum.

Intensive Group (approximately 12 students)

Staffing: 1 classroom teacher

1 reading specialist

1 special education teacher

1 English language teacher or educational assistant

Curriculum: Reading Street or My Sidewalks On by Reading Street

SRA Reading Mastery Signature Edition

SRA Reading Mastery Lesson Connections

LindaMood-Bell LIPS Vowel Circle

During small group instruction, four groups of students rotate every 15 minutes among the teachers. The special educator teaches the SRA Reading Mastery Signature Edition which is direct instruction and includes pre-reading, decoding, blending, segmenting, rhyming, symbol identification and comprehension. The classroom teacher uses the SRA Reading Mastery Lesson Connections which is uses decodable texts for modeling, guided reading, and independent reading. The reading specialist uses the Lindamood-Bell LiPS sequencing curriculum for reading, spelling and speech. The fourth group is with the English Language teacher or educational assistant working on various skills such as journaling, sentence writing or vocabulary.

Data Meetings:

Staff have two types of formal meetings:

- Data Dig meeting after Dibels benchmarking three times during the academic year
- Problem Solving Meetings - progress meetings after nine weeks of intervention to discuss student progress

Teacher Training:

- Consortium on Reaching Excellence in Education - Elementary Reading Academy
    - Course provided foundational reading principles necessary for teaching reading in a diagnostic, prescriptive way.
- Curriculum-based training specific to the curriculum used i.e. Lindamood-Bell LiPS training

Funding: All costs for Walk to Read process were part of school budget, and no additional funding was used. Additional SRA Reading Mastery books and resources were purchased, but less than $2,000 has been spent since the start of Walk to Read. Training on administering DIBELS, teaching multisyllabic words etc. was provided by current staff.

Key Features:

- Students are routinely assessed, based on performance they move between classrooms.
- Teachers have a weekly forty minute planning period to discuss student progress and adjust lessons and groupings as necessary.
- Special Education teacher can serve more students with this push-in model.
- School staff report that there have been fewer special education referrals since implementing the Walk to Read process, and the students who are referred generally qualify for special education.

Dyslexia Pilot Indianapolis, Indiana

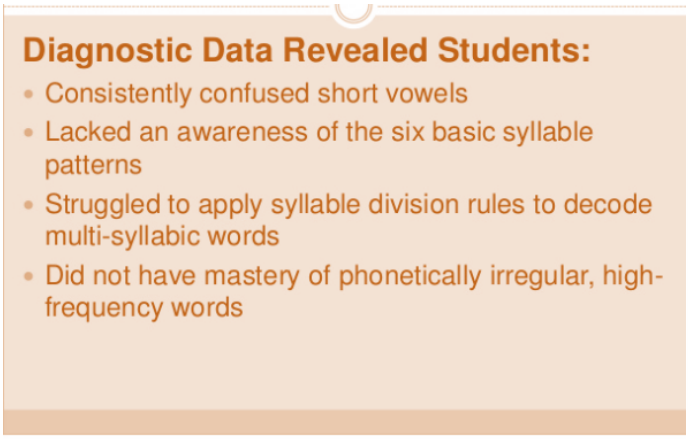
Background: A significant number of students read below grade level according to DIBELS and SRI data. The core reading program was not meeting the needs of most students* More students needed reading interventions than could be serviced with resources available. Reading interventions did not complement or align to the core reading program. Students' inability to read grade-level text impeded learning in all content areas.

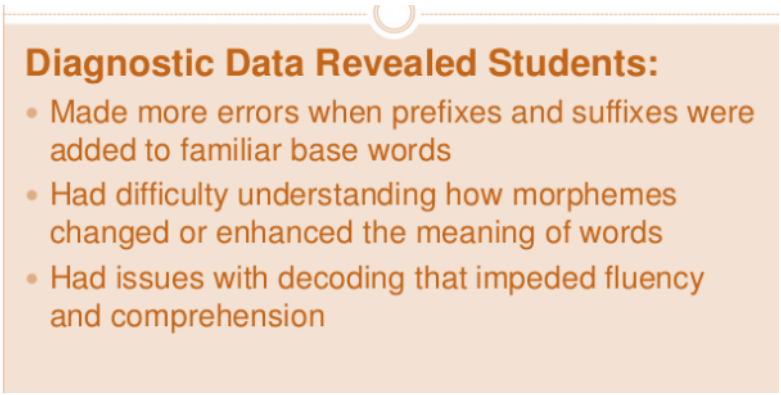
*Dynamic Measurement Group defines an effective Core Reading Program as one that results in less than 20% of students needing Tier II or Tier III interventions. (Source: Presentation http://www.slideshare.net/peavlerj/may-7-20832792)

Contact:

Jamey Peavler: jameypeavler@marooneyfoundation.org
English Language Arts Instructional Specialist, MA Rooney Foundation

Screener: DIBELs: Diagnostic Data Revealed the following:





Gap Analysis: Core instruction that doesn't cover all the foundational reading skills, because the curriculum doesn't allow for it and/or teachers are not adequately prepared to teach it, leads to significant skill gaps and reading gaps.

Training: Teachers in K-2 trained in Orton Gillingham approach to teaching reading prior to the beginning of the pilot program.

- Teachers are provided with daily lesson plans, model lessons, co-teaching opportunities, and data to support implementation. Provided monthly, grade-level specific professional development.
- Teachers attended training on the Orton Gillingham approach for three days.

- $20 an hour stipend provided
- Materials: Card deck, decodable readers: each deck is $21, readers: $154 per classroom
- A district trainer seeking OG certification through the AOGPE facilitated professional development, eliminating the cost for hiring an outside teacher trainer.
- Training Instruction Manual, MA Rooney

School Selection: 2 inner city Indianapolis Public Schools: Ralph Waldo Emerson ES, James Russell Lowell ES. These schools were chosen because they are two of the lowest performing schools in the district. Some students did not know a single letter name and could not provide the beginning sound of a given word at the beginning of the year (BOY)

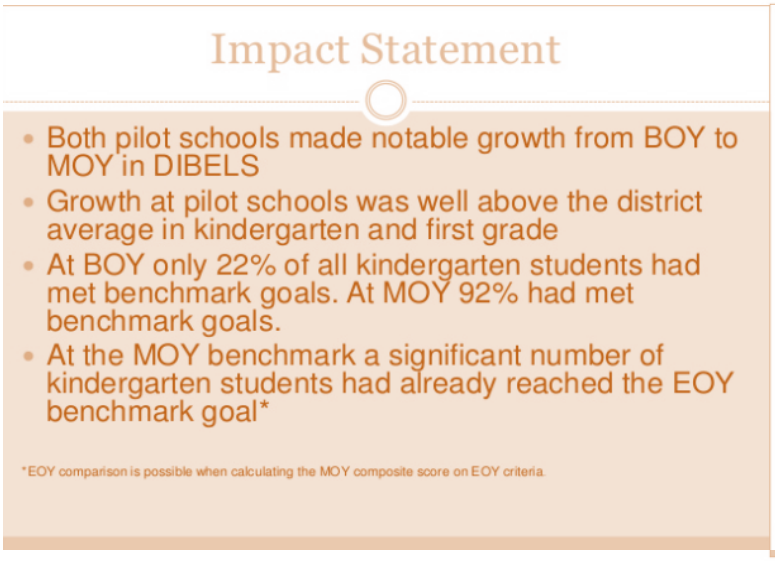
Instruction: Daily instruction using the OG approach for 30 minutes of the 90 minute reading block

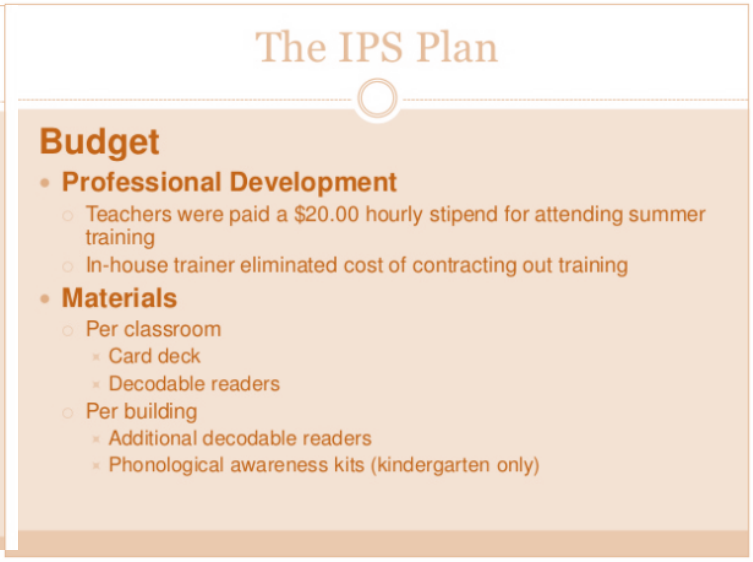
Grades Served: K-2

Years: 2012-2013

Funding: MA Rooney Foundation

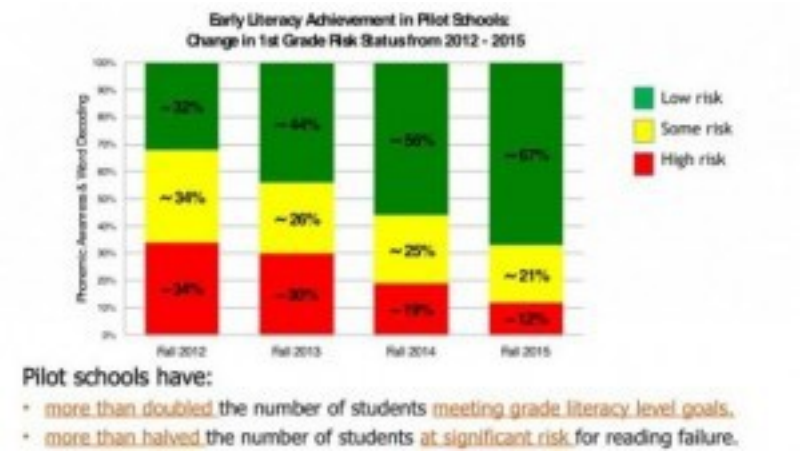
Pilot Results: Pilot Program PowerPoint, Year One





Connecticut Reading Pilot

Connecticut K-3 Literacy Initiative (CK3LI) 2012-present, a study funded by the CT State Department of Education, is working with Hill for Literacy to develop a comprehensive school-wide reading plan and to build internal expertise and capacity in schools. In addition, students at risk for reading difficulties have been identified and provided with small group intervention.



More than 1,000 students in 50 classrooms in five schools in Hartford, East Hartford, New Haven, and Windham have been exposed to the model for the past four years. While outcome data revealed successes early on, schools that participated for three years or more showed the most dramatic improvement, schools adopting the CT K-3 Reading Model for three years or more had more than doubled the number of students meeting grade-level literacy goals, while also reducing the number of students at significant risk for reading failure by more than half.

In our role in this partnership with UConn, Hill for Literacy, the Commission on Children, and the Connecticut State Department of Education, Literacy How Mentors deliver embedded professional development to K-3 teachers in Alliance schools. Literacy How is also on the management team and helped to create Parent Engagement curriculum used at Family Literacy Nights.

SOURCE: Retrieved from the World Wide Web, August 16, 2016: http://www.literacyhow.com/our-impact/our-research/,
Resources: Using Scientific Research-Based Interventions: Improving Education for All Students

Dyslexia Pilot, Utah

Screener: DIBELs Next

Number of Schools: Up to 5 can apply to the Utah State Board of Education

Funding: Up to $30,000, total funding: $375,000 -- money awarded in 2015 by Legislature

Teacher Training: Covered in the legislative funding

Length: 3 years, ends 2019

Research/Data: To be collected by a third party bidder (no data yet) began 2015-16 school year

Costs/Budget: See next page for breakdown

Grant Application

Program Requirements

1. Applicant Information (5 points).
    a. Description of the program and its role within the LEA
    b. Demographic information *for current program*, including:
        i. Number of students who are economically disadvantaged
        ii. Number of students who are eligible for special education services
        iii. Number of students who are English Learners
2. Program Description, Gap Analysis, and Strategy for Implementation of High-Quality Components (50 points). *Provide the information requested as a description of your current program and an analysis of each area, indicating issues for which improvement is needed to create a high-quality program and the plan for improvement in that area.*
    a. Evidence-based literacy interventions composed of curricula and instruction that are explicit, systematic, cumulative, multisensory, and focused on the following areas:
        i. Phonology
        ii. Phonics
        iii. Word recognition
        iv. Spelling
        v. Fluency
        vi. Vocabulary
        vii. Reading comprehension
    b. Instructional methods that demonstrate Tier II interventions that provide supplemental instruction and supports systematically delivered in addition to, and aligned with, the grade-level Core.
        i. Description

   ii. Gap analysis and plan for improvement

c. Instructional methods that demonstrate Tier III interventions that address the specific needs of students who are the most at risk or who have not responded to tier II interventions, providing frequent, intensive, and targeted small group instruction using evidence-based curricula, and is developed to maximize student achievement, reduce behavior problems, and increase long-term success.
   i. Description
   ii. Gap analysis and plan for improvement
d. Program's ongoing, focused, and intensive professional development for educators responsible for implementing the interventions.
   i. Description
   ii. Gap analysis and plan for improvement
e. Process by which the program will conduct ongoing assessment of a student's educational growth to inform instruction.
   i. Description
   ii. Gap analysis and plan for improvement
f. Process by which the program will use DIBELS to conduct and report benchmark data (three times a year) for of each participating student.

The Enrolled Copy of the authorizing legislation can be downloaded at:

http://le.utah.gov/~2015/bills/static/SB0117.html

UT pilot costs.xlsx

A	B	C	D	E	F
Pilot Costs					
Low End	High End				
Tier II					
Per School					
5,000.00	7,000.00	Materials			
1,980.00	3,300.00	($100 an day for substitute x 3 days = 300 per teacher ($900 for 3), $15.00 an hour stipend x 8 hours x 3 days for aids =360 per aid (1080 for 3), per year minimum based on 6 educators (3 teachers & 3 aids) per school and maximum 10 educators (5 teachers x 5 aids)			
1,500.00	2,500.00	(Substitute or aid cost to cover PLC time for progression data review and Tier placement discussions. (100 an day x 4 hours x 5 days a year = 250 per teacher) minimum based on 6 educators, maximum 10 educators)			
8,480.00	**12,800.00**	**Total per school**			
25,440.00	**38,400.00**	**3**	**schools in pilot**		
42,400.00	**64,000.00**	**5**	**schools in pilot**		
Per LEA					
2,500.00	5,000.00	PD trainer Per LEA (RFP through USOE could coordinate training of multiple LEA's educators for a cost savings)			
10,980.00	**17,800.00**	**Total Tier II Costs 1 school LEA**			
27,940.00	**43,400.00**	**Total Tier II Costs 3 school in LEA**			
44,900.00	**69,000.00**	**Total Tier II Costs 5 school in LEA**			
Tier III					
Per School					
5,000.00	7,000.00	Materials			
300.00	900.00	($100 an day x 3 days = 300 per teacher per year for 1 to 3 educators per school)			
5,300.00	**7,900.00**				
15,900.00	23,700.00	3	**schools in pilot**		
26,500.00	39,500.00	5	**schools in pilot**		
Per LEA					
2,500.00	5,000.00	PD trainer Per LEA (RFP through USOE could coordinate training of multiple LEA's educators for a cost savings)			
7,800.00	**12,900.00**	**Tier III Costs 1 school LEA**			
18,400.00	**28,700.00**	**Tier III Costs 3 school LEA**			
29,000.00	**44,500.00**	**Tier III Costs 5 school LEA**			
Reading Interventionist Endorsement					
3,000.00	15,000.00	per teacher tuition 1 teacher minimum, 5 teach ma			
21,780.00	**45,700.00**	**Final Cost Costs 1 school LEA**			
49,340.00	**87,100.00**	**Final Cost Costs 3 school LEA**			
76,900.00	**128,500.00**	**Final Cost Costs 5 school LEA**			

BEST PRACTICES

WHY BEST PRACTICES ARE CRITICAL TO STUDENT SUCCESS

In the field of education, the term best practice is not clearly or uniformly defined. What is well accepted is the notion that best practice can be used to delineate courses of action or teaching methodologies, strategies, and/or frameworks. Guidelines that qualify as best practice guidelines in education are typically set by authorities such as the Institute for Education Science in the Department of Education, the National Institutes of Child Development and Human Behavior, the National Institutes on Deafness and Other Communication Disorders, the International Dyslexia Association, the American Speech-Language-Hearing Association, and other governmental agencies or organizations that provide guidance to stakeholders that are based on sound scientific research.

The Task Force adopted the definition of research-based instruction to mean instruction that has been demonstrated to "work" through empirical scientific study. Evidence-based refers to whether a research-based methodology is effective, determined by evidence gathered using that research-based methodology. Research-based programs and practices that have a track record (evidence) of effectiveness are those that can be utilized with the greatest amount of confidence (McCardle, Chhabra, & Kapinus, 2008). Therefore, for the purposes of this Report, the Task Force refers to best practices as those that are evidence-based practices, and will make recommendations about best practices based upon the fidelity of the foundational research and the convergence of evidence that shows effectiveness. The effectiveness of teaching and the outcomes of student learning are dependent upon the use of best practices that are rooted in scientific research.

Commitment to best practices is essential not only for students who are diagnosed with dyslexia, but also for children who are at-risk for reading failure. Issues of poverty, socio-economic background, and for whom English is not their primary language (English Learners), will be among those who benefit from best practices designed to improve student reading outcomes. When these populations of learners struggle with reading, their difficulty is often attributed to reasons other than a neurobiological predisposition to struggling with reading (Craig, 2008; Craig & Washington, 2006; Washington, 2016). A body of research is developing to support the identification, assessment, and instruction for these populations of learners who have reading challenges (Aikens, & Barbarin, 2008; Blanchett, W.J., 2010; Coley, 2002; Craig, 2008; Craig, & Washington, 2006; Lemke, 1997; Lewis, Sandilos, Hammer, Sawyer, Méndez, 2016; Orr, 2003; Purcell-Gates, McIntyre, & Freppon, 1995; Ruggs & Hebl, 2012; Washington, JA, Patton-Terry, N., & Seidenberg, M., 2013).

DEFINITION AND CHARACTERISTICS OF DYSLEXIA AND "PRE-DYSLEXIA TENDENCIES" (Targeted Students)

The Task Force acknowledges that understanding dyslexia is critical to promoting best practices for identifying, assessing, and teaching students who demonstrate word level reading difficulties that are associated with dyslexia. A scientifically-based definition must be adopted and disseminated among educators, specialists in the field of education, university professionals in teacher training programs, education administrators, parents, and individuals who have dyslexia to ensure that research-based instructional practices are taught in undergraduate and graduate programs, and to practicing educators in all school settings for professional development. The Task Force recommends using the definition developed by the International Dyslexia Association:

> *Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.*

This definition aligns with the definition found on the Eunice Kennedy Shriver National Institutes of Child Health and Behavior (NICHD) in the National Institutes of Health (NIH):

> *Dyslexia is a brain-based type of learning disability that specifically impairs a person's ability to read. Individuals with dyslexia typically read at levels significantly lower than expected despite having normal intelligence. Although the disorder varies from person to person, common characteristics among people with dyslexia are difficulty with phonological processing (the manipulation of sounds), spelling, and/or rapid visual-verbal responding (i.e.rapid naming). Dyslexia can be inherited in some families, and recent studies have identified a number of genes that may predispose an individual to developing dyslexia.*

Many decades of research have validated the language basis of dyslexia (Catts, 1989, 1993; Kamhi & Catts 2002, 2012; Lyon, Shaywitz, & Shaywitz 2003; Puranik, Petscher, Otabia, & Catts, 2008; Rimrodt & Cutting, 2007; Storch, & Whitehurst, 2002) and have pinpointed key areas of difference in those with dyslexia in the language centers of the brain.

The human brain is pre-programmed to understand and use oral language during typical development. However, the brain is not hard-wired for reading as a natural developmental occurrence. Rather, for most individuals, reading must be explicitly taught. When children and adults struggle with their ability to decode (sound out) words, neuroimaging studies have demonstrated that the brain's activity is markedly different from the activities recorded in the brains of typically developing readers and proficient adult readers. The areas of difference

involve areas of the brain that are critical for oral language. Therefore, it is commonly accepted that reading is a language activity, and successful reading depends upon the integrity of the language centers in the left hemisphere of the brain.

Throughout this document, targeted students will refer to: struggling readers and/or at-risk readers as students who are at risk for failure to achieve grade level reading competency (Mather, 2016). The terms, "at risk readers" or "struggling readers" typically refer to learning problems noted in preschool and kindergarten that may be predictive of early reading difficulties associated with dyslexia. Mostly, these learning difficulties are rooted in the oral language underpinnings needed for reading: phonological awareness, phonemic processing, word retrieval and rapid naming. Young children who struggle to learn the names of colors, shapes, and numbers, despite their ability to match them and point to the correct color, shape, or number when the name is provided, demonstrate word retrieval difficulties. This word retrieval difficulty is also noted when children struggle to say letter names and sounds despite explicit instruction and practice in preschool and kindergarten. These word retrieval behaviors are often present in the oral language profile of individuals who have dyslexia either as a general word retrieval difficulty or as rapid naming difficulties for automatized (familiar/overlearned) information such as colors, days of the week, etc., or both.

Additionally, children in preschool and kindergarten who struggle with rhyming, identifying the number of syllables in words, separating the individual sounds in syllables and words, and manipulating sounds in words may also be demonstrating pre-dyslexic tendencies or are "at risk" for seamless acquisition of reading. If there is a familial incidence for dyslexia or reading difficulties, these oral language and very beginning reading skills may be viewed as pre-dyslexic tendencies or characteristics that put the child at risk for his/her ability to learn how to read at the same rate and facility as his or her peers (Catts, 1991; Catts & Hogan, 2003; Catts, Nielsen, Bridges, Bontempo, & Liu, 2013; Shafer & Rastegari, 2016).

The oral language difficulties that are often warning signs of future reading problems can be identified and assessed before a student enters kindergarten and particularly before first grade. However, when these oral language skills and familial history are not recognized before formal schooling begins, these difficulties are later reported in the student's developmental history and educators observe them in the classroom (Frijters, Lovett, Steinbach, Wolf, Sevcik, & Morris, 2011; Helland, 2016; Kamhi & Catts, 2012; Magnusson, & Naucler, 1990; Manis, F. R., Seidenberg, & Doi, 1999; Torgesen, 1998). These skill deficits are reported in scientific literature and include:

- Difficulty with perceiving the sounds and sequence of sounds in words (phonological awareness and phonemic processing);
- Difficulty with understanding and generating rhyming words;
- Difficulty retrieving words;
- Difficulty remembering certain overlearned information
    - Alphabet names

  - Number names
  - Days of the week, months of the year, seasons
  - Math facts
  - Lists of information on a topic
- Difficulty articulating words in some cases;
- Poor reading decoding (sounding out words) and reading fluency (reading rate and accuracy);
- Poor ability to spell words; and
- Difficulty with written language at the sentence and paragraph levels

Students, identified as having difficulty acquiring grade level reading skills, often have foundational oral language difficulties and familial history as part of his/her developmental history. These classroom difficulties follow students with dyslexia through the school years. In middle school and high school, students with dyslexia may have learned how to decode (sound out words), but their reading often remains slow, dysfluent and inaccurate, which affects higher order comprehension. The dysfluency is secondary to an incomplete knowledge or application of phonological awareness, phonemic processing, and phonics. In addition, difficulties with spelling and written language often persist into high school and impact the student's college and career readiness – a primary goal of education standards.

Students who struggle with dyslexia and low reading achievement or competency may demonstrate secondary behaviors that are associated with their academic difficulties. Parents, teachers, and individuals with dyslexia report that they may have low self-esteem, and may engage in escape and avoidance behaviors such as not doing school work or homework. Some students exhibit behavioral difficulties such as becoming the class clown or acting out while others appear to withdraw, lose interest or lack "grit," effort or motivation (Eissa, 2010; Kempe, Gustafson, Samuelsson, 2011; Humphrey, 2002; Terras, Thompson, & Minnis, 2009). Research has also demonstrated that some children who have dyslexia suffer from anxiety disorders and depression resulting from their academic difficulties (Alexander-Passe, 2008, 2015, 2016; Maughan, Rowe, Loeber, Stouthamer- Loeber, 2003; Miles, 2004; Sahoo, Biswas, & Padhy, 2015). Children who have dyslexia will often spend countless hours on homework with little benefit. Homework becomes a battle; children cry; parents despair (Gouax, 2016; Silinskas, Niemi, Lerkkanen, & Nurmi, 2013).

SUPPLEMENTARY BEST PRACTICES RECOMMENDATION

DYSLEXIA HANDBOOK

Task Force surveys as well as public comments revealed that many Maryland public school Individual Education Program (IEP) teams do not identify dyslexia, or use the term as a diagnostic descriptor for a reading disability. Using the diagnostic label, dyslexia, directs educators to understand the processing, academic and associated challenges experienced by the student who has dyslexia, which in turn drives effective Structured Literacy instructional approaches. The members of the Task Force listened to parent testimony and expert speakers,

reviewed pertinent scientific literature, and engaged in discussion about use of the term dyslexia to describe a specific set of reading behaviors associated with a specific subset of children who have difficulty with reading.

The U.S. Department of Education released guidance on the use of the term dyslexia, dysgraphia and dyscalculia in the form of a "Dear Colleague" letter on October 23, 2015. On November 7, 2016, the MSDE has issued a Technical Assistance Bulletin (TAB) on SLD, with a supplement that details how school systems should identify and address the students exhibiting characteristics associated with dyslexia, dysgraphia, and dyscalculia. The issuance of the supplement supports the guidance released by the U.S. Department of Education. The Task Force commends MSDE for their policy guidance and considers this policy clarification the result of stakeholder collaboration with MSDE in the service of Maryland students.

The Task Force looks forward to efforts by MSDE to widely publicize the "SLD TAB" to all public and independent schools through the MSDE website, electronic and US mail, parent networks, the state and local special education advisories, as well as through social media, training and preparation modules, and other communication outreach. This is a very important message for families and educators to hear and incorporate into everyday practice, procedure and policy throughout the State.

To support the implementation of the "SLD TAB" at the Local School System level, administrators, educators, and parents would benefit from a resource on dyslexia that is electronically accessible to all. To serve this need, the Task Force recommends the development of a *Dyslexia Handbook.* This Handbook should reflect the neurobiological and operational definition of dyslexia provided in the dyslexia Technical Assistance Bulletin and mirrored in this document, and should include evidence-based practice guidelines for identification, assessment, and intervention, service delivery model(s), and progress monitoring strategies and tools. *This is a legislative opportunity to establish and fund a Working Group or Dyslexia Advisory Committee to develop the handbook using the Best Practices document presented by the Task Force.*

TEACHER TRAINING: UNDERGRADUATE, GRADUATE, AND TEACHER AND ADMINISTRATOR PROFESSIONAL DEVELOPMENT

The Task Force offers five specific recommendations for teacher preparation, at the undergraduate and graduate levels of university teacher training programs (pre-service) and for teacher professional development (in-service) levels. The Task Force acknowledges and commends MSDE for establishing work groups to revise the four required reading courses for certification in the State of Maryland.[19] The Task Force suggests strategies for change in the way teachers are prepared at the undergraduate (pre-service) and graduate levels of university preparation, as well as in professional development (in-service) training through implementation of the following recommendations:

[19] https://eisportal.msde.maryland.gov/public/documents/MarylandApprovedReadingCoursesApril2015.pdf *and* http://www.dsd.state.md.us/COMAR/searchall.aspx

1. Revamp curricula in MSDE approved reading courses to include information specific to dyslexia and a Structured Literacy approach to teaching reading:
    - The neurobiological underpinnings of typical oral language, typical reading development, dyslexia, and other reading disorders;
    - Components of effective instruction including those contained within a Structured Literacy approach;
    - The structure of the English language (phonology, morphology, syntax, grammar, and the direct links to phonics and orthography);
    - Training in data-driven dialogue;
    - The scope and sequence of beginning reading skills as outlined in Appendix A of the Common Core State Standards; and
    - Increase the credit hours of the MSDE required Processes and Acquisitions of Reading course and the Assessment for Reading Instruction course for pre-service students 90 required hours or 6 credits each.

2. Require the reading instruction competency exam, Teaching Reading: Elementary Education (5203) assessment [20] to the necessary exams needed for teacher certification, to all elementary education teachers, special education teachers, teachers of English for speakers of other languages, reading teachers, instructional resource teachers, Title I teachers, teachers trained outside of Maryland, as well as secondary teachers of English/Language Arts.

3. Include practicum requirements with at-risk readers, supervised by teacher educators who have a credible track record of knowledge and clinical skills related to the acquisition of typical reading and skill deficits in reading. This should include knowledge and experience with implementing a Structured Literacy approach to teaching reading, to prepare teachers to identify and instruct this population of learners in the classroom setting.

4. Use teacher coaches in professional development for reading instruction. These coaches should have credentials in Structured Literacy for in-service and professional development of teachers. The use of teacher coaches has demonstrated that teachers

[20] Retrieved on August 14, 2016 from https://www.ets.org/s/praxis/pdf/5203.pdf

change their practice, are more engaged in the effort to improve their practice, and that their students demonstrate better outcomes (Graham, 2007; Halloway, 2001; Kretlow & Bartholomew, 2010; Ross, 1992; Villar & Strong, 2009; Wong, 2015).

5. Educate administrators including, but not limited to, principals and special education supervisors, and chairpersons in dyslexia knowledge and practice training to better support the teachers in their buildings. Administrators are instructional leaders, therefore, they need a sound understanding of Structured Literacy to support, guide, and evaluate teachers. Administrators need access to continued training and the ability to demonstrate a basic understanding of the components of Structured Literacy and its application.

The Task Force notes that to ensure transformation in teacher training and ultimately teacher performance, professional development for teacher trainers, university professors and adjunct professors in the knowledge and skills relevant to the early identification, assessment and instruction for students with dyslexia, would improve teachers' ability to meet the diverse reading instructional needs of the students in their classrooms.

The Task Force recognizes that teacher training is critical to the success of any intervention process or program implemented with struggling readers. The Task Force encourages providers of undergraduate and graduate education to review the content of their teacher training curricula and revise course content to include identification, assessment, and instruction for students who exhibit reading difficulties associated with dyslexia. The *Knowledge and Practice Standards for Teachers of Reading* developed by the International Dyslexia Association (IDA) could be used as a reference guide for curricula revisions.[21] Additionally, Appendix A of the Common Core State Standards provides additional information to guide curricula for teaching reading in teacher training coursework.[22] "Just as children can't guess their way to reading," says Jim Barksdale, founder of The Barksdale Reading institute, "teachers can't guess their way to teaching."[23]

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[21] IDA's *Knowledge and Practice Standards for Teachers of Reading* (2010) Retrieved on July 15, 2016 from https://app.box.com/s/ex1psv12zdq61vz7j4b6rsln7zsgtxii

[22] http://www.corestandards.org/assets/Appendix_A.pdf) page 17-22

[23] Retrieved on September 25, 2016 from http://msreads.org/pre-service-reading-instruction

Specific to this Task Force are the issues related to dyslexia as a language-based disorder of reading, and recommendations are made with emphasis on the need for teachers to understand how and why so many students have difficulty achieving grade level reading skills. In addition to scientifically-based training content in undergraduate and graduate teacher training programs (pre-service) and for embedded professional development (in-service), training should include opportunities to engage in supervised practice teaching, with coaching/supervision conducted by professionals who have knowledge and clinical skills related to the range of difficulties with reading acquisition, but also with specific knowledge in instruction for students who have dyslexia (Moats, 2009).

Consistency across school systems and higher education in providing teacher training for teaching reading is critical to student success. Training for both university and in-service professional development should focus on explicit, systematic instruction for all five essential components of reading which was supported by the National Reading Panel in 2001.[24,25]

[24] https://www.nichd.nih.gov/research/supported/Pages/nrp.aspx

[25] https://dyslexiaida.org/effective-reading-instruction/

UNIVERSAL EARLY SCREENING FOR ALL STUDENTS

Children who have difficulty with phonological awareness, rapid naming, and other characteristics associated with dyslexia, are not identified early, often experience reading failure, and ultimately school failure which may result in issues related to self-esteem, behavior, and motivation. The Task Force reviewed pertinent scientific literature and invited leaders in the field of reading and dyslexia to speak at their public meetings, and used this information to recommend and inform a universal screening process and set of procedures for identification and assessment, and progress monitoring to facilitate data-driven decision making for instruction.

The Task Force designed a screening and assessment protocol for all Maryland's public schools for kindergarten through third grade and in subsequent grades when students continue to show difficulty reaching reading proficiency. The screening and assessment protocol would ensure that all children who are at risk for reading failure are identified as early as possible and are provided with appropriate and intensive evidence-based interventions to prevent reading and associated academic failure. The recommended protocol includes:

- Universal screener for all students;
- Continuous progress monitoring;
- Informal diagnostic strategies and instruments;
- Assessment of oral language and reading performance with standardized diagnostic instruments;
- Screening of new children who enroll in a school; and
- Communication among all disciplines, including parents.

The Task Force suggests that if schools use universal screeners to identify students early as being at risk for reading difficulties, then targeted, evidence-based instruction can be implemented to reduce the risk of reading failure and reduce referrals to special education. Effective instruction would be based on informal diagnostic screenings, and progress should be monitored closely and often to ensure the instruction results in reading improvement in areas identified as at risk or deficient (Hasbrouck & Tindall, 2005; Hasbrouck & Tindall, 2006; Pool & Johnson, 2008; Torgesen, 1998). It has been reported in the literature that 95% of all children can be taught to read at a level constrained only by their reasoning and listening comprehension abilities (Fletcher & Lyon, 1998).

The proposed screening system fits easily within a multi-tiered system of supports. Differentiation of instruction would occur at the core instruction level, and specific interventions would be provided at tiered levels of instruction. Students are placed in flexible groups and are moved from group to group depending on progress monitoring data.

Use of a screener aligns with determining the needs for early intervening services as put forth by IDEA 2004 so that appropriate staffing and funding can be planned accordingly.[26]

Schools must carefully identify students who have had a lack of exposure versus those students who struggle to learn. Students in kindergarten who have had no prior school experience, who do not speak English as a first or primary language, and/or who have had limited exposure to basic concepts (e.g., colors, letter names, letter sounds, number names, etc.) require exposure to a core reading curriculum that includes explicit and direct teaching of foundational reading skills in a language and literacy rich environment. If by the end of the first semester of kindergarten, concerns persist with the ability to meet curricular benchmarks for early reading standards, more targeted instruction should be initiated. For students who enter the school district in grades other than kindergarten, results of the screener should be weighed against the demands of the grade level curriculum to determine whether monitoring is an appropriate strategy or if more targeted intervention should be initiated upon school entry.

The scientific literature reports that family history plays a role in genetic disposition for reading difficulties (Pugh & McCardle, 2011; Scerri, & Schulte-Körne, 2010; Shaywitz, 2003; Schumacher, Hoffmann, Schmäl, Schulte-Körne, & Nöthen, 2007). Family history of dyslexia and/or reading difficulties must be considered when screening for dyslexia. When family history is not considered, an opportunity for early identification and intervention is missed.

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[26] Retrieved on September 16, 2016 from http://idea.ed.gov/explore/view/p/,root,dynamic,TopicalBrief,8,

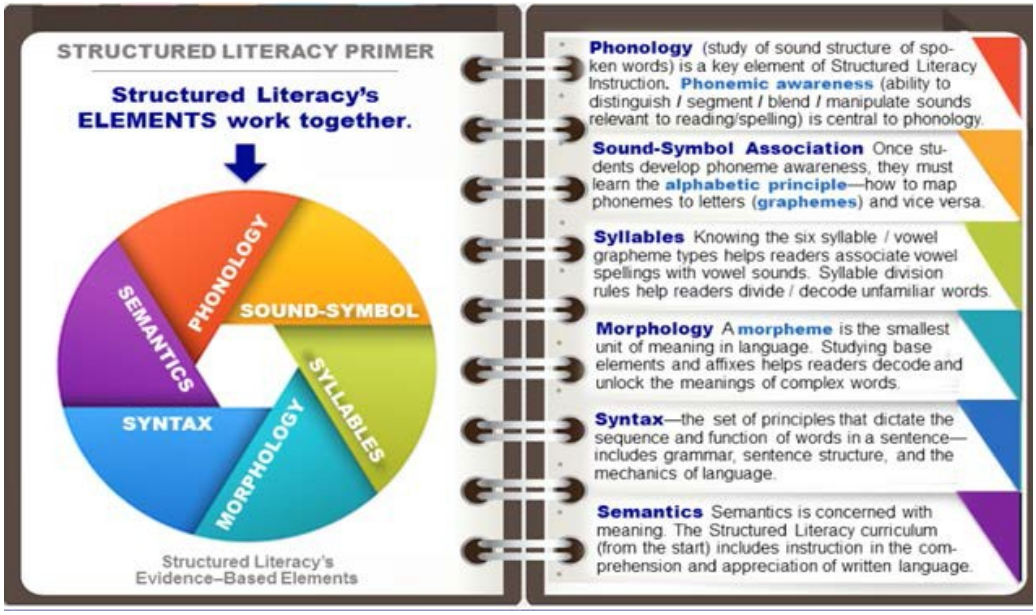
The Task Force is aware that public schools in Maryland may use the *Kindergarten Readiness Assessment (KRA)* that measures social foundations, language/literacy, mathematics, physical well-being, and motor development and commends MSDE for their recognition of the importance of early language, motor, social, and academic skills on later school success.[27] While this assessment is a global assessment of a child's readiness for kindergarten, it does not assess phonological awareness, phonemic processing, word retrieval, rapid naming, and alphabetic code knowledge with the depth and breadth necessary to provide data that can be used to ascertain early warning signs that may predict difficulty with the acquisition of reading.

KEY COMPONENTS OF EFFECTIVE INSTRUCTION FOR STUDENTS WHO STRUGGLE WITH READING, WRITING AND SPELLING

Structured Literacy Approach: Definition and Components

The term, "Structured Literacy" is a term used to describe a systematic, explicit, multisensory phonics approach to teaching reading. This term was adopted by the International Dyslexia Association (IDA) in 2014 after surveying hundreds of members. A reading approach or program that includes explicit, systematic, cumulative, intensive and multisensory instruction that integrates listening, speaking, reading, and writing through evidence-based methodology would be considered a Structured Literacy approach (Berninger & Wolf, 2009; Birsh, 2011; Henry, 2010; Davis, N., et al, 2010; Kerins, Winkler, Sweeney & Carran, 2006; Mather & Wendling, 2012; Yoncheva, Wise, & McCandliss, 2015).

[27] http://earlychildhood.marylandpublicschools.org/prek-grade-2/maryland-early-learning-framework/ready-4-kindergarten)



Retrieved October 15 from www.interdys.org

There are six major components to Structured Literacy instruction:

1. **Phonology, phonological awareness, and phonemic processing:** The understanding of the sound system within a language (phonemes); the rules that govern how sounds can be combined in words; the understanding that words are made of individual sounds; and the ability to manipulate sounds within words.
2. **Sound-symbol association:** Understanding the relationship between sounds of the letters and the written symbols that represent the sounds and the variety of symbols (letters and letter combinations) that stand for consonant and vowel sounds.
3. **Syllable instruction:** Understanding rules that govern the structure of words (syllables) and the phonics rules that reflect that rule system.
4. **Morphology:** The understanding that root words and parts of words, such as prefixes, suffixes, and grammatical markers such as past tense, plurals, and possessive forms specify and change the meanings of words and how they function within sentences.
5. **Syntax:** The rules that dictate the sequence of words within phrases and clauses in sentences within a language.
6. **Semantics:** Language meaning at the word, sentence, and discourse levels (oral and written). An example would be understanding vocabulary in terms of word definitions, alternate meanings, multiple meanings, opposite meanings, etc.

Elements of Structured Literacy

Structured Literacy includes a specific set of principles of instruction that include:[28]

- **Multisensory:** Teaching that includes presentation of information to multiple sensory modalities, (i.e., visual, auditory, kinesthetic, and tactile), simultaneously, to enhance memory and learning.
- **Systematic and Cumulative:** Employing a system of instruction that follows a sequence of skills that reflect the logical order of progression rules of the language. Instruction begins with easiest skills and progresses to most difficult, with mastery required at each level as a prerequisite to advance to the next level or skill set.
- **Direct Instruction:** Specific skills are taught directly, with opportunities for practice and immediate corrective feedback.
- **Diagnostic Teaching:** Using data to drive instruction; student performance dictates the content of a subsequent lesson. When students do not master a skill or concept, a diagnostic teaching framework requires determining what foundational skills should be taught to bring the skill in question to mastery.
- **Synthetic and Analytic Instruction:** Multisensory language programs include both synthetic and analytic instruction. Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole. Analytic instruction presents the whole and teaches how this can be broken down into its component parts

Resources are available for educators and education administrators to help them adopt a Structured Literacy approach to reading instruction in their settings. Some useful resources are:

- Appendix A of the Common Core State Standards, pages 17-22, provides the specific skills children need to be proficient readers which align with a Structured Literacy approach to reading instruction.[29]
- IDA's *Dyslexia Handbook* (pages 15 -16) provides a good explanation of the components of Structured Literacy. [30]
- IDA's *Knowledge and Practice Standards for Teachers of Reading* (2010) [31] provides information delineating what teachers should know and do with respect to teaching reading using a Structured Literacy approach.

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[28] http://everyonereading.org/about/about-multisensory-structured-language-education/

[29] http://www.corestandards.org/assets/Appendix_A.pdf

[30] http://www.readingrockets.org/sites/default/files/IDA%20Dyslexia%20Handbook.pdf

[31] https://app.box.com/s/ex1psv12zdq61vz7j4b6rsln7zsgtxii

- The Barksdale Reading Institute in Mississippi provides a summary graphic to help educators understand the components of Structured Literacy, the linkage among the components, within a scope and sequence of skills from simple to complex.[32]

There are many marketed programs that follow a Structured Literacy approach to teaching reading. When seeking to use one of these programs, educators are urged to ensure that the program contains the six major components outlined above.

Structured Literacy is not a time-ordered program; it does not guarantee a child is "cured" in nine weeks. Rather, Structured Literacy is a way to teach students the process of reading, over time, following a specific sequence of objectives, with continuous reinforcement and practice of skills previously taught and learned. For students who struggle with dyslexia, the duration of instruction as an intervention program would most likely take place for at least a year to build the reading foundations and achieve grade level reading skills. This approach should continue to be used to ensure that the student continues to remain on (or surpass) grade level reading or significantly narrow the gap in reading proficiency relative to grade level peers.

Often, students with dyslexia require more than one year of specialized, frequent and intensive reading instruction designed to meet their individual needs. Response to instruction depends upon a multitude of factors that include:

- the age of the student when intervention begins;
- the level of severity of dyslexia with respect to reading skill deficits;
- the presence of other cognitive processing difficulties such as slow work speed (processing), attention difficulties, significant word retrieval and/or rapid naming difficulties;
- the level of expertise of the teacher;
- the intensity, frequency, and fidelity of instruction;
- the amount of immediate corrective feedback for correction students receive from their teacher during instruction; and
- whether the strategies are integrated throughout the school day.

For students who show characteristics of dyslexia and who do not meet grade level benchmarks, Structured Literacy instruction has demonstrated improved reading outcomes (Alamprese, MacArthur, Price, & Knight, 2011; Ehri, Nunes, Stahl, & Willows, 2001; Hatcher,

[32] http://msreads.org/files/2014/09/RU-Grid-w-revisions-Jan-2015-as-pdf.pdf

Hulme, & Snowling, 2004; Joshi, Dahlgren, & Boulware-Gooden, 2002; Nagy, Berninger, Abbott, Vaughan, & Vermeulen, 2003; Nagy, Berninger, & Abbott, 2006; Hatcher, Hulme, & Snowling, 2004; Wolf, Miller, & Donnelly, 2000). The Task Force advocates that all students receive instruction in a Structured Literacy approach to reading, with increases in intensity and specificity of instruction applied to students who demonstrate deficits in reading skills.

A MULTI-TIERED SYSTEM OF SUPPORTS (MTSS) FOR STRUGGLING READERS, INCLUDING THOSE THAT HAVE DYSLEXIA

MTSS was originally coined as Response to Intervention (RTI) in IDEA 2004 (34 CFR §300.307- 309). Some professionals and school districts use these terms interchangeably. MTSS refers to practices that:

- identify academic risks in a school setting before they lead to school failure
- engage in school-wide screening processes
- implement intervention(s) and progress monitoring to measure academic progress

This tiered system of instruction and supports is designed to prevent school failure and to reduce referrals to special education.[33] Different states and different school districts make implementation decisions about whether to use a tiered system of support, and how that system is designed. The Task Force recommends that a Structured Literacy approach to reading instruction should be implemented with all students, at all tiers of instruction beginning in kindergarten through at least third grade. There are many ways to implement MTSS. The Task Force offers an example of MTSS for reading instruction using a Structured Literacy approach.

[33] https://theinstitute.umaryland.edu/sefel/docs/highlights/Early%20MTSS%20Presentation%20SEFEL.pdf

- Tier 1
  - All students receive Structured Literacy instruction in the classroom
- Tier 2:
  - Supplementary intervention provided to students who receive Tier 1 instruction, but who demonstrate areas of weakness within the Tier 1 instruction.
- Tier 3:
  - Targeted intervention provided to students who do not make progress with Tier 2 level of instruction
  - These students may present with very low achievement, may not respond to instruction, or have been evaluated to determine if they are eligible as a student with a disability under IDEA 2004.
  - This level of instruction would be adapted to address individual student needs through the systematic use of assessment data (which may include formal diagnostic data), to fine tune the use of the appropriate type of evidence-based intervention to have positive outcomes for students with dyslexia.
  - Students at this level require intensive time and support to make progress toward grade level reading competency.

Aside from the need to have a strong collaborative infrastructure in a school building and within a district to facilitate a multi-tiered system of supports, teachers must be trained to implement differentiated instruction as well as evidence-based, targeted foundational reading interventions to students who do not meet grade level reading benchmarks. A tiered system of instruction and supports is designed to prevent school failure and to reduce referrals to special education. Several states have implemented pilot projects with positive results.

SUPPLEMENTARY AIDS AND SERVICES, INSTRUCTIONAL & TESTING ACCOMMODATIONS

Supplementary Aids and Services, IDEA 2004 Sec. 300.42 for Classroom Instruction

IDEA defines supplemental aids and services as "aids, services, and other supports that are provided in regular education classes, other education-related settings, and in extracurricular and nonacademic settings, to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate."[34] Supplementary aids and services are determined collaboratively by educational teams, and decisions about supplementary aids and services must be driven by data collected on students using these supports across environments over time. The learning needs of students with dyslexia vary; thus, the accommodations and supports needed for educational success will vary significantly from student to student.

Instructional and Testing Accommodations for Students with Dyslexia

Instructional and testing accommodations include but are not limited to extended time, human reader, scribe, text to speech (TTS), and modifying tests or assignments.[35] Determinations about instructional and testing accommodations should be a team decision. Because accommodations enable a student to demonstrate grade level skill and knowledge acquisition, accommodations provide teachers with feedback about student progress.

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[34] http://idea.ed.gov/explore/view/p/,root,regs,300,A,300%252E42

[35] http://archives.marylandpublicschools.org/MSDE/testing/docs/2012_MD_Accommodations_Manual_.pdf

For many students who have dyslexia, grade-level reading comprehension, conceptual understanding, and content knowledge are accurately assessed when testing accommodations are provided. We anticipate that MSDE will continue to recognize the need for provision of professional development to help educators and administrators understand "why" and "how" to provide supplementary aids and services to struggling readers, and in particular, to students who have dyslexia. The Task Force supports the use of universal design and assistive technology for all students as needed, but would like to specify that students who have demonstrated difficulties acquiring reading skills should be allowed to demonstrate their knowledge using these accommodations. Decisions to provide accommodations should be collaborative and data-driven, with clear measures for how these accommodations affect academic progress.

Assistive Technology and Services for Students with Dyslexia

Students who have dyslexia often demonstrate reduced ability and stamina when decoding and reading relative to their peers; therefore, aids and supports such as reading test questions aloud or use of audio books and/or read aloud technology are key supports that will allow students with dyslexia access to grade-level content, language, and vocabulary. Technology-based supports are available to the student to access grade level curriculum, while effective instruction is being delivered. Effective use of assistive technology requires teacher knowledge and training, as well as consistent opportunities for students to use these supports in multiple environments.

SYSTEMIC CHANGE AND THE IMPLEMENTATION OF A DYSLEXIA EDUCATION PROGRAM

The Task Force recognizes that a commitment by administrative leadership is a key component to success when changing a paradigm. While individual teachers may have the will to change their practice for students who have dyslexia, they require the support of the administration to sustain change. Teachers and parents reported to the Task Force that schools do not use the word "dyslexia." The Maryland Department of Education has taken steps to address this issue. Professional development for administrative leadership is critical to help them understand the issues, adopt an initiative, and provide valuable support to teachers. The implementation of a universal screening program to identify dyslexia and struggling readers requires the commitment of administrative leadership at both the district and school levels.

Some research shows that about 10% of the student population will exhibit reading difficulties aligned with dyslexia (Siegel, 2006), while other literature reports the incidence of dyslexia at anywhere from 8% to 17% (Shaywitz & Shaywitz, 2003). Identifying struggling readers early to provide instruction that meets their needs adds value with respect to cost, by potentially reducing referrals to special education, time spent in special education meetings, by reducing paperwork burdens that take away from actual instruction, and improving reading outcomes.[36]

This in turn has a net positive impact on school achievement in reading;[37] family and stakeholder satisfaction, and improved teacher job satisfaction.[38] When building-level leadership demonstrates commitment to an initiative, provides implementation support, and develops the model with teacher involvement and input, teachers are more likely to change their practice.[39] Strong instructional leadership to implement an initiative aimed at identifying and supporting students who have dyslexia at the district, but especially at the building level, can transform the educational environment for this population of learners.[40]

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[36] Ohio's Pilot Data, year 3: http://education.ohio.gov/Topics/Special-Education/Students-with- Disabilities/Specific-Learning-Disability/Dyslexia-Pilot-Project

[37] http://www.rtinetwork.org/learn/research/field-studies-rti-programs

[38] http://ies.ed.gov/ncser/pubs/20143000/pdf/20143000.pdf

[39] http://www.sciencedirect.com/science/article/pii/S0742051X13001790

[40] Ohio's Pilot Data, year 3: http://education.ohio.gov/Topics/Special-Education/Students-with-Disabilities/Specific-Learning-Disability/Dyslexia-Pilot-Project

Transparency in Data Collection and Reporting

Measurable student achievement is important to administrative leaders, teachers, parents, and students. The Task Force acknowledges the benefits of transparency in collecting and reporting data regarding how at-risk, struggling readers are identified and the type and frequency of instruction provided to them.

Stakeholders have suggested that data be collected over time to evaluate the efficacy of a systemic approach to reading instruction and intervention for all learners within a school district and at the building level. Universal screening for reading and subsequent targeted, evidence-based instructional programs should yield outcomes that reveal improved reading over time, from the earliest grade levels through high school. The following information would reveal the outcomes and success of a targeted systematic approach to reading instruction and intervention:

- Number of students screened;
- Number of students identified as needing a reading intervention program;
- Number of students served using the new program;
- How those students are served, i.e., number of sessions per week, length of each session;
- Who delivers instruction using the new program;
- The educational background of the individual giving the instruction;
- Progress monitoring, curriculum-based and criterion-referenced, at specified intervals; and
- Searchable database that can drill down to the individual school district and individual schools.

SUMMARY

The Task Force has outlined major components for best practices **for Treating and Educating Students Identified as Having Dyslexia or Struggling Readers**:

- Include evidence-based practices;
- Provide professional development for all educators, including administrative leadership;
- Provide a Structured Literacy approach to reading instruction for beginning readers and for struggling readers;
- Adopt a universal reading screening procedure beginning in kindergarten;
- Use a multi-tiered system of supports for struggling readers (MTSS);
- Use supplemental aids and services for instruction and testing; and
- Provide transparency in collecting, tracking and reporting data on students served.

The Task Force also recommends a common definition for dyslexia, a common understanding of the term best practice as it relates to evidence-based practice and recommendations for Maryland-based colleges of education on teacher preparation. A common thread in all Task Force presentations and in public comment was that many stakeholders asked that teachers and educators who work with students be provided the resources and tools needed to identify and teach reading to students at risk for reading failure and dyslexia. The Task Force survey results indicate that teacher candidates and in-service teachers report that they don't have the knowledge, skills, and practice in the foundations of reading to be successful in the classroom. Based on this information, the Task Force provided recommendations to guide the next steps for higher education to ensure that their teacher candidates are fully prepared to provide equitable and sound reading instruction to all students.

While it was not the charge of this legislation to compile a handbook of best practices for the practitioner, the Task Force recommends the development of a *Dyslexia Handbook.* This Handbook should provide a neurobiological and operational definition of dyslexia, evidence-based practice guidelines for identification, assessment, and intervention, service delivery model(s), and progress monitoring strategies and tools. This would involve professionals from the Maryland State Department of Education (MSDE) and a committee of stakeholders that includes practitioners in public education and independent education, a research scientist with a research portfolio related to dyslexia and reading disabilities, a teacher trainer involved in training related to dyslexia research and training, a representative from an Institution of Higher Education (IHE) teacher training program, representatives from dyslexia advocacy organizations, and parent/s.

IDENTIFICATION OF DYSLEXIA AND STRUGGLING READERS: METHODOLOGIES & AGE OF IDENTIFICATION

Schools can reduce reading failure when students are identified early in their school careers as at-risk for reading difficulties using universal screening and targeted, evidence-based instruction. Fletcher and Lyon (1998) reported that 95% of all children can be taught to read at a level constrained only by their reasoning and listening comprehension abilities. Effective instruction is based on informal diagnostic assessments, and progress should be monitored closely and often to ensure the instruction results in reading improvement in areas identified as at risk or deficient (Hasbrouck & Tindall, 2005; Hasbrouck & Tindall, 2006; Pool & Johnson, 2008; Torgesen, 1998).

Current practices in Maryland and in other states reveal that school district personnel do not acknowledge that dyslexia is an educational condition, claiming it is a medical diagnosis. Secondly, school personnel tell parents that they are not allowed to use the term dyslexia when describing certain patterns of reading difficulties exhibited by young and older students. Third, despite the plethora of evidence, research articles, websites, books, and film documentaries, school personnel persist in telling parents that a reading disorder either can't be detected until the child is in third grade and exhibits a two-year delay in reading skills or that a child cannot be "tested" for dyslexia before the child learns to read. Compounding the problem is the fact that despite years of repeated, replicated research, teachers have not been exposed to the theoretical foundations of dyslexia, as well as evidence-based instructional approaches that facilitate reading progress in struggling readers whose profiles align with dyslexia characteristics. Because of these widespread erroneous beliefs and practices, many children who exhibit a dyslexic reading profile are not identified early, experience reading failure, and ultimate school failure with concomitant issues in self-esteem and motivation. The Task Force reviewed pertinent scientific literature and invited well-respected leaders in the field of reading and dyslexia to speak to the Task Force. The Task Force used the information to design a comprehensive universal screener that outlines procedures for identification and assessment and progress monitoring to facilitate data-driven decision making.

The screening and assessment protocol for Maryland's public schools should be implemented for kindergarten through Grade 3 and in subsequent grades when students continue to show difficulty reaching reading proficiency. The screening assessment protocol will ensure that all children who are at risk for reading failure are identified as early as possible and are provided with appropriate and intensive evidence-based interventions to prevent reading and associated academic failure. The recommended protocol includes:

- universal screener for all students in grades K-3;
- continuous progress monitoring;
- informal diagnostic assessments and instruments;

- assessment of oral language and reading with standardized diagnostic instruments if necessary;
- the screening of new children who enroll in a school; and
- communication among all disciplines, including parents.

The Task Force believes that when students are identified early in their school careers as "at risk" for reading difficulties using universal screeners, targeted, evidence-based instruction can be implemented to reduce the risk of reading failure. The Task Force recommends that when students do not make adequate progress in any grade, similar diagnostic protocols must be used to identify reading weaknesses and discriminate among the specific reading skill deficits so they may receive appropriate interventions.

A universal screener has the potential to be extremely beneficial to early identification of students who are at risk for the acquisition of reading skills. A screener would ascertain skills in phonological awareness and phonemic processing, rapid naming abilities as well as alphabetic code knowledge (i.e., sound/symbol association for vowels, consonants, consonant digraphs, and vowel teams). These skills have been cited in the literature as predictive of later reading success (Blachman, 1984; Catts, 1991; Catts & Hogan, 2003; Geva, Yaghoub- Zadeh, & Schuster, 2000; Páez & Rinaldi, 2006). Students require exposure to the general education curriculum and literacy rich environments. It is appropriate to monitor this group of students throughout the first semester of kindergarten, using screening data to mark progress. If by the end of the first semester of kindergarten, concerns persist with the ability to meet curricular benchmarks for early reading standards, more targeted instruction should be initiated. For students who enter the school district in grades other than kindergarten, results of the screener should be weighed against the demands of the grade level curriculum to determine whether monitoring is an appropriate strategy or if more targeted intervention should be initiated upon school entry.

The scientific literature reports that family history plays a role in genetic disposition for reading difficulties. (Pugh & McCardle, 2011; Scerri. & Schulte-Körne, 2010; Shaywitz, 2003; Schumacher, Hoffmann, Schmäl, Schulte-Körne, & Nöthen, 2007). Family history of dyslexia and/or reading difficulties must be considered when screening for dyslexia. When family history is not considered, an opportunity for early identification and intervention is missed.

Once students are identified as at-risk based on a screening tool, additional diagnostic assessments should be administered to determine a student's specific area of weakness. School systems must give careful attention to the type of screener and the type of informal diagnostic assessment being used. This Task Force also recommends using screeners that are normed in addition to using informal diagnostic assessments written by decoding experts in the field of reading.

Educators in school systems must be properly trained to enable the school system to successfully implement the recommendations listed below. Training would include the following:

- Administration of assessments;
- Ongoing progress monitoring;
- Analysis of student performance on assessments; and
- Curricular decisions based on data-driven dialogue.

The Task Force recommends that this training be an integral part of pre-service training in departments of education at Maryland's colleges and universities (Huford, Huford, Head, Keiper, Nitcher & Renner, 2016). Until pre-service training includes scientifically-based foundations and practices for dyslexia, school systems should be prepared to provide in-service training conducted by persons with knowledge of foundational reading based on scientific research and a background of differential diagnosis of reading difficulties. This type of in-service training should be on-going, and include coaching, to ensure that educators continue to increase their knowledge and skills to best serve the needs of all students.

I. UNIVERSAL SCREENER (Screening Instrument/Screening Tool)

Purpose: Identifies students who may be at-risk for achieving reading competency. A screener does not tell a teacher where to begin instruction. Students identified with the screener require further diagnostic assessments to determine specific areas of weakness and to develop an intervention plan.

Requirements: (1) Strong predictive ability and classification accuracy

(2) Norm-referenced scores

(3) Criterion-based cut points are acceptable to determine levels of risk

(4) Quick to administer

How often to administer: Beginning, middle, and end of a school year (or until a student achieves end-of-year screening benchmark score).

Requirements for administering assessment: Anyone who is trained to give the assessment and demonstrates competency (per administration directions of the instrument).

All students should be screened beginning in kindergarten and continue to be screened until they meet end-of-year screening benchmark scores as dictated by the screening tool guidelines.

It is recommended that students who have difficulty with word retrieval tasks and rapid naming receive a speech and language evaluation by a speech-language pathologist to determine any oral language issues that affect reading acquisition. Word retrieval weaknesses include:

- Difficulty retrieving a specific word (calls a sheep a goat)
- Poor memory for classmates' and teachers' names
- Difficulty with rapid naming (naming colors, numbers, letters, shapes, objects)
- Hesitant speech, filled with pauses or vocalizations ("um, you know")
- Frequently using words lacking specificity ("stuff, thing, what you call it")
- Having a problem remembering/retrieving automatized verbal sequences (days of the week, alphabet, number names 1-10)

Students who show word retrieval and/or rapid naming weaknesses present a higher risk of being identified as struggling readers than children who do not exhibit this type of oral language difficulty (Norton, E. S. & Wolf, M., 2012). This population of learners may struggle with acquiring the names of letters and sounds (alphabetic knowledge) and/or reading fluency.

KINDERGARTEN

Screen all kindergarteners *and any student who is new to the school or system*

Assessment components:

Different assessment components will be administered at different times of the year as indicated by the screener directions:

- Upper and lower case letter names
- Letter sounds
- Phonological Awareness and Phonemic Processing – number of syllables in words, number of sounds in words, identification of sounds within words (blending and segmenting), rhyming, sound manipulation (including elision)
- Rapid Automatized Naming (RAN): serial naming colors, letters, and/or numbers – *one time only*
- Working Memory (WM): digit recall forward and backward, letter-number sequencing -- *one time only* **.**

Screener assessments to consider (examples) but are not inclusive of all possible instruments:

- DIBELs (Dynamic Indicators of Basic Literacy Skills)
- DIBELs Next
- AIMSWeb (Academic Improvement Measurement System)
- PAR (Predictive Assessment of Reading)
  - includes RAN (Rapid Automatized Naming)
- CTOPP-2 (Comprehensive Test of Phonological Processing – 2nd Addition)
  - selected subtests for RAN, digit recall
- PAST (Phonological Awareness Screening Test)
- RAN/RAS (Rapid Automatized Naming and Rapid Alternating Stimulus)

GRADE ONE

Screen any student not screened in kindergarten, include kindergarten screening components not listed below

Assessment components

Different components are administered at different times of the year as indicated by the screener directions:

- Upper and lower case letter names
- Letter sounds
- Closed-syllable nonsense and real words

- Dictation-Letter writing (given a letter sound)
- One-minute normed oral reading fluency (Hasbrouck & Tindall, 2005; Hasbrouck & Tindall, 2006)

Screener assessments to consider (examples) but are not inclusive of all possible instruments:

- DIBELs
- DIBELs Next
- AIMSWeb
- Predictive Assessment of Reading (PAR)
- Phonological Awareness Literacy Screening (PALS)
- Phonological Awareness Screening Test (PAST)

GRADES TWO AND ABOVE

Screen any student not screened in kindergarten or first grade, include kindergarten and/or first grade screening components not listed below

Assessment components:

- One-minute normed oral reading fluency (Hasbrouck & Tindall, 2005; Hasbrouck & Tindall, 2006)
- Single word reading (nonsense and real words, grade level high-frequency words)

Screener assessments to consider (examples) but are not inclusive of all possible instruments:

- DIBELs
- DIBELs Next
- AIMSWeb
- Test of Word Reading Efficiency, Second Edition (TOWRE-2)
- Predictive Assessment of Reading / PAR (Includes RAN)
- Phonological Awareness Screening Test (PAST)
- Any norm-referenced oral reading screener

**For students in grades two and above who do poorly on a one-minute normed oral reading fluency screener and/or single word reading, consider giving a grade one or kindergarten normed screener and an informal diagnostic assessment.*

II. INFORMAL DIAGNOSTIC ASSESSMENTS

Students to Assess: Students identified in universal screening as at-risk for achieving reading competency.

Purpose: Provides a comprehensive look at student strengths and weaknesses. Identifies areas of weakness used to plan student groupings for targeted instruction and/or intervention.

Requirements: Measures specific strengths and weaknesses in phonological awareness (including phonemic awareness), graphemes (letter names), letter sounds, phonological awareness, decoding, word lists, oral reading accuracy, oral reading rate, encoding (spelling), etc.

How often to administer: After student is identified at-risk for achieving reading competency.

Requirements for administering assessment: Anyone who is trained to give the assessment and demonstrates competency (per administration directions of the instrument).

Assessment components:

- Upper and lower case graphemes (letter names) and sounds.
- Phonological Awareness that includes blending, segmenting and/or manipulation (including elision) at syllable, and phoneme levels.
- Decoding real and nonsense words of varying difficulty (single syllable words with short vowels, digraphs, blends, r-controlled vowels, vowel teams, silent-e, consonant – le, and multi-syllable words with fully decodable spelling patterns).
  Note: Accuracy and rate in oral reading is assessed with the oral reading screening assessment.
- Grade appropriate high-frequency words[41]
- Grapheme (letter) writing (when given a letter sound)
- Spelling (word and sentence dictation)

Assessments to consider (examples) but are not inclusive of all possible instruments:

- Pre-Reading Probes - Readsters
- Diagnostic Decoding Survey - Really Great Reading Company
- Six-Minute Solution – Sopris West
- Informal Spelling Inventory (Can be administered in addition to a phonological/decoding assessment, not in place of).

41 Retrieved on August 28, 2016 from http://www.readsters.com/wpcontent/uploads/ComparingDolchAndFryLists.pdf

- Phonics Inventory (given until mastery is achieved)
- PhonoGraphix Inventory –PhonoGraphix Reading Company
- Read Naturally
- Gates-MacGinitie

III. PROGRESS MONITORING

Students to Assess: Students identified as at-risk for achieving reading competency and students receiving a reading intervention.

Purpose: (1) For students in intervention: to monitor whether intervention is working.

(2) For at-risk students not in intervention and receiving targeted instruction: to monitor growth and determine whether they should be placed in intervention.

Requirements: Formal or informal assessment tool to measure growth in area of intervention.

How often to administer: At least every two weeks for students in intervention or at-risk and not in intervention (use progress monitoring guidelines as dictated by the screener).

Requirements for administering assessment: Anyone who is trained to give the assessment and demonstrates competency (per administration directions of the instrument).

Assessment components:

- Areas of weakness targeted in intervention instruction.

Assessments to consider (examples) but are not inclusive of all possible instruments:

- Informal diagnostic assessments for targeted skills
- Grade leveled passages for oral reading accuracy or rate
- DIBELs[42]
- DIBELs Next[43]
- AIMSWeb[44]

[42] https://dibels.uoregon.edu/

[43] http://www.aimsweb.com/faq/what-is-aimsweb

[44] http://www.aimsweb.com/faq/what-is-aimsweb

IV. FORMAL DIAGNOSTIC ASSESSMENTS

Students to Assess: Used when additional data is needed to confirm IDEA eligibility and access to more intensive intervention such as specialized instruction provided through a Special Education (speech/language and/or academic services) Individualized Education Program (IEP).

Purpose: To identify areas of weakness and provides a normed comparison to peers by providing a standard score and percentile rank in each area tested.

Requirements: A battery of formal, norm-referenced assessments determined by professionals in a particular school or district.

How often to administer: Recommended by federal, state, district, school policy, professional assessment team, and/or assessment protocols.

Requirements for administering assessment: Trained special education teacher, school psychologist, speech/language pathologist, and/or diagnostic prescriptive teacher (per administration directions of the instrument).

Assessment components:

- Phonological Memory
- Phoneme Manipulation
- RAN
- Verbal Working Memory
- Processing Speed (at the cognitive level)
- Decoding (nonsense words)
- Oral Reading Fluency
- Vocabulary – oral receptive
- Spelling
- Letter/word Identification
- Word Attack
- Comprehension (oral and reading)

Assessments to consider (examples/selected sections) but are not inclusive of all possible instruments:

- Comprehensive Test of Phonological Awareness, Second Edition, (C-TOPP-2)
- Wechsler Intelligence Scale for Children, Fifth Edition, (WISC-V)
- NEPSY-II
- Woodcock-Johnson Tests of Cognitive Abilities, Fourth Edition (WJcog-IV)
- Woodcock-Johnson Tests of Achievement, Fourth Edition, (WJach-IV)
- Wechsler Individual Achievement, Third Edition (WIAT-3)
- Gray Oral Reading Test, Fifth Edition, (GORT-5)
- Test of Written Language, Fourth Edition, (TOWL-4)

- Test of Word Reading Efficiency, Second Edition (TOWRE-2)
- Wide Range Assessment of Memory and Learning, Second Edition (WRAML-II)
- Clinical Evaluation of Language Fundamentals, Fifth Edition (CELF-5)
- Peabody Picture Vocabulary Test, Fourth Edition, (PPVT-4)
- Test of Integrated Language and Literacy Skills (TILLS)
- Wide Range Assessment of Memory and Learning (WRAML-2) (includes digit recall)

V. NEW STUDENTS ENROLLING IN A SCHOOL

Grades K–3

All students in grades K–3 enrolling in a school should immediately be given the appropriate screener for the student's grade, unless the scores from an appropriate screener are available from the student's previous school.

Grades 4–12

Students in grades 4–12 enrolling in a school should immediately be given a normed-referenced oral reading fluency assessment. Students scoring below 97% accuracy for the words correct per minute benchmark should be administered an assessment similar to a Diagnostic Decoding Survey (words in isolation, real and nonsense) to determine the integrity of their phonics knowledge and application. In addition, these students should be assessed in the areas of: phonological awareness (to include phoneme manipulation), encoding (spelling) and Rapid Automatized Naming (RAN) (Hasbrouck & Tindall, 2005; Hasbrouck & Tindall, 2006; Norton & Wolf, 2012 and Kilpatrick, 2015).

All Grades

All students in any grade who do not score at benchmark on any part of the screener should be given a RAN assessment if a RAN score is not available for the student.

Final Note

The Task Force strongly believes that we have the scientific knowledge, the will, the infrastructure and personnel in our public schools to stem the tide of reading failure for our students, many of whom exhibit the kinds of oral language and reading deficits aligned with dyslexia.

PILOT PROGRAM

Dyslexia Pilot Implementation Protocol

Scope and Sequence to Promote Proficient Reading in Maryland

The Maryland Task Force on the Implementation of a Dyslexia Education Program was charged with designing a pilot program for the implementation of a dyslexia education program. The Task Force acknowledges the magnitude of this opportunity to make a difference for children who struggle with reading in Maryland.

Purpose of the Pilot

The *intent and goal* of the Pilot Program project is to provide a scalable, model program for Maryland's schools to identify, assess, and teach students who present with reading difficulties in the classroom, especially for those whose learning profiles align with dyslexia as defined in the Executive Summary and Best Practices section of this Report, and with the Maryland State Department of Education Technical Assistance Bulletin on *Dyslexia, Dysgraphia, and Dyscalculia*. The Pilot Program includes design frameworks for *improved teaching, flexible instructional grouping*, and *data-driven decisions* for instructional programming based upon *universal screening and assessment data and progress monitoring*. The program will demonstrate the *need for and the benefit of early identification* of students who struggle with the acquisition of reading, and specifically, those students whose reading challenges align with the characteristics of dyslexia.

The Task Force utilized information gathered from nationally renowned speakers at our public meetings, scientific literature, documentation of best practices, current practices and pilots implemented in other states, and parent input to design the components of this comprehensive program. The first step in implementing this Pilot would require the establishment of a *Pilot Advisory Board* to work with MSDE. The Pilot Advisory Board would consist of stakeholders across the State as well as representatives from the Maryland State Department of Education (MSDE) such as:

- Representative(s) from the Maryland Task Force for the Implementation of a Dyslexia Education Program
- Decoding Dyslexia representative(s)
- MSDE representative
- Representative from the State Superintendent's Association
- Representative from the teachers' union
- Speech-Language Pathologist

- School Psychologist
- Special Education Teacher or Instructional Resource Teacher
- General Education Teacher
- Professional from an independent school that serves students with dyslexia and other learning differences
- An independent professional who has the credentials demonstrating theoretical knowledge, training, Structured Literacy, and teaching in the field of dyslexia

The Pilot Advisory Board would work with MSDE to identify a *Principal Investigator* (PI) for the project who is an education research scientist who has a strong research portfolio in reading and dyslexia, pilot study implementation, and teacher training. If the PI cannot demonstrate evidence of all required components, then his/her accomplishments in two of the required components must sufficiently outweigh lack of the third. If any components are not included in the PI's portfolio, that component must be provided by a co-investigator or person on the Implementation Team, specified in the PI's plan for Implementation of the Project, with the Implementation Team's areas of expertise and selection to be determined by the PI and constrained by the allotted budget. It would be expected that the pilot program's overhead costs would be minimized to drive as much funding as possible to fund teachers, coaches, and materials.

The Pilot Advisory Board in partnership with MSDE would develop a Request for Proposal (RFP) to select the PI. The RFP can be circulated to entities such as but not limited to: the International Dyslexia Association (IDA); the Society for the Scientific Study of Reading (SSSR); The Dyslexia Foundation (TDF); and universities that are leaders in the field for dyslexia and related reading topics of study.

It is envisioned that the Pilot program would include a partnership(s) with an institution of higher education (IHE), participating LEAs, MSDE, and possibly private foundations. The Pilot Advisory Board would work collaboratively with the Maryland Association of School Superintendents and MSDE to identify the school districts involved in the pilot program.

Once the LEA are identified, the Pilot Advisory Board would work with the superintendent or his/her designee to identify the LEA Team that would implement the program and who then would work collaboratively with the PI and the Pilot Implementation Team. The LEA Team members would include:

- Teacher trainer (with credentials that include a masters' degree in education or related field, demonstrated knowledge and practice teaching Structured Literacy, minimum of five years' experience in the field;
- Speech-language pathologist;
- School psychologist;
- Special education teacher or Instructional Resource Teacher;
- Teacher of speakers of other languages (ESOL);
- Reading specialist;
- School building administrator;
- Coach/Mentor (master teacher who has experience working with children with dyslexia and a Structured Literacy approach to instruction); and
- Parent.

The PI would have regular, frequent meetings with the LEA Team to ensure all steps in the implementation process occur as planned. The specific collaboration components would be delineated between the PI and the LEA Team, aligned with the project design in the implementation of the Project Plan.

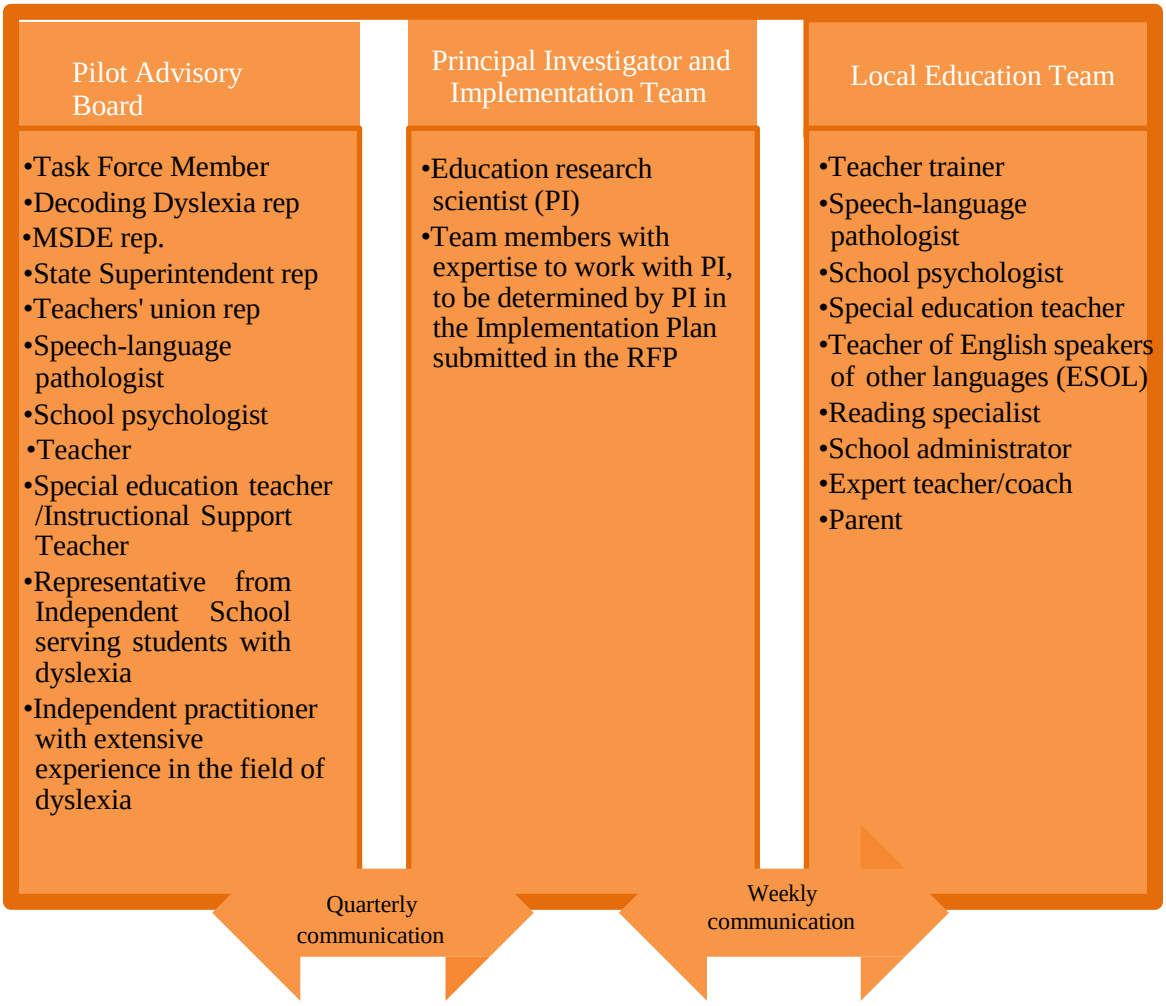
The Task Force agrees the Pilot would constitute a six-year initiative, in which the first year is a "pre-year" to prepare teachers, administrators, and parents before program implementation in the pilot schools. This pre-year would provide the Principal Investigator and the Advisory Board time to set up the program design including curriculum for both teacher training and student instruction and to set up processes and procedure for funding mechanisms.

The Pilot delineates the need to track student reading outcomes beyond second grade to demonstrate the longitudinal effectiveness of a Structured Literacy approach to teaching reading.

The Pilot design framework includes:

- Using a Structured Literacy approach to teaching reading to all students
- Training for all educators, administrator, and parents
- Implementing a Universal Screening protocol for all students, beginning in kindergarten
- Engage in progress monitoring (i.e., mechanisms for collecting and reporting data-driven outcomes)
- Implement program staffing and student groupings that are different from current practices

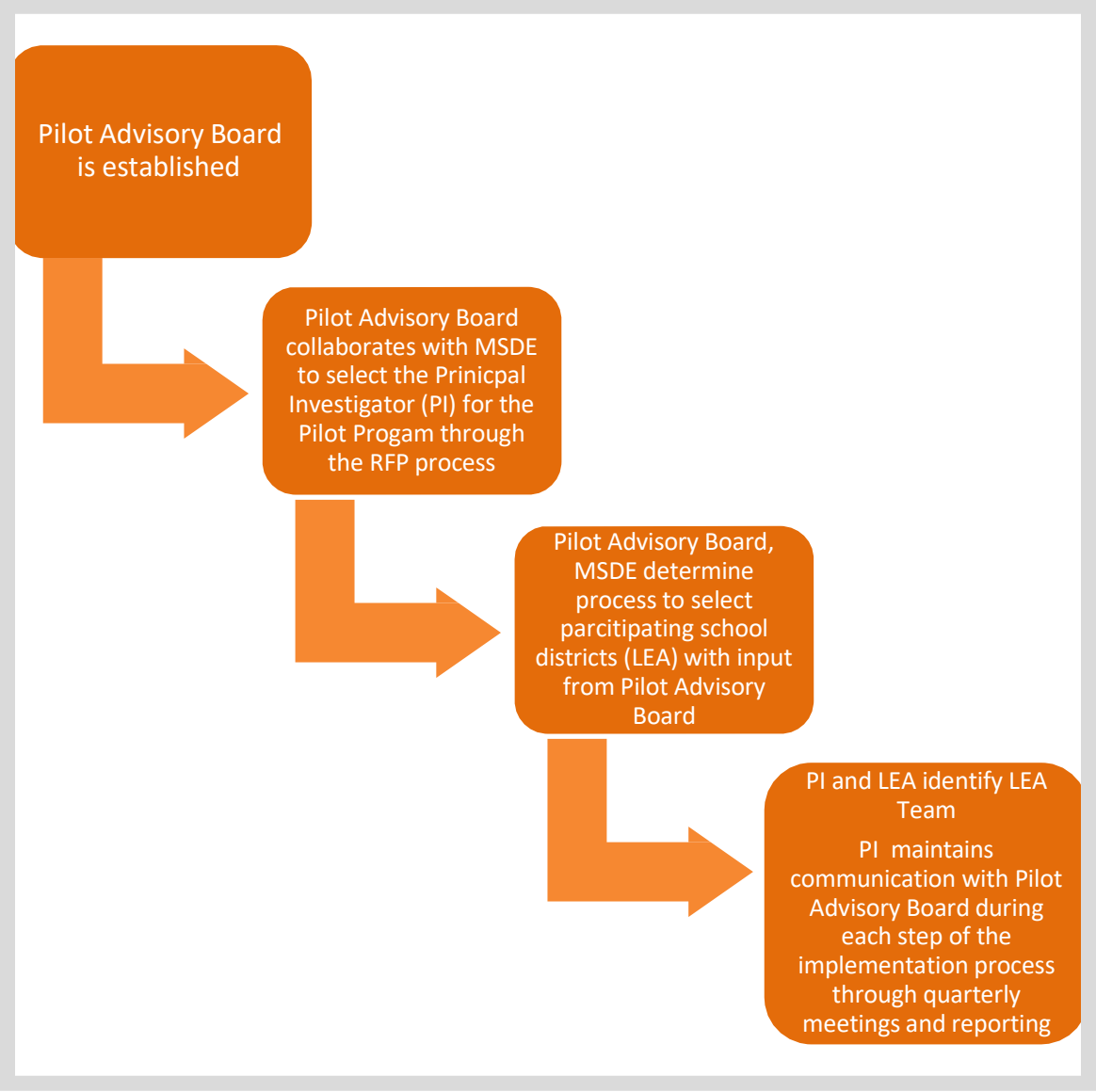
Chart 1. Members of Pilot Program Implementation Teams



Students Served

This pilot program will serve all students in kindergarten through second grade. The Pilot would be implemented for selected school districts in the State who have a superintendent as well as building administrators who are willing to support this initiative for six years. The Task Force discussed the number of school districts that could support a pilot program along with the number of schools that would participate per district. The general consensus among Task Force members regarding an "appropriately limited geographical area," was that the pilot program should be limited to two school districts to ensure fidelity of design, program implementation, and fit within funding availability. Further discussion led to agreement that the demographics of the selected school districts should include the diversity of student demographics represented in the State's public school system, ranging from rural to inner city, accounting for diversity in race, gender, socio-economic levels, culture and languages spoken.

Chart 2. Pilot Implementation Sequence



Teacher Training Model (in-service, professional development)

The literature as well as teacher and parent anecdotal reports reveal the need for better teacher training for understanding dyslexia as a constellation of specific difficulties that are evident in students every classroom across the nation. Additionally, it is well accepted that teachers need specific training in approaches and methodology, supported by scientific research, to teach students who exhibit the characteristics associated with dyslexia how to read and become literate citizens. The training would follow an embedded professional development paradigm. To meet that need, a specific training structure is recommended:

Staff at participating schools would be notified one school year in advance of the pilot implementation at their school to:

- Promote understanding of the parameters of the Pilot, and establish buy-in and excitement by the school community, staff and parents;
- Provide short meaningful in-service workshops on topics such as the neurobiological underpinnings of typical reading, dyslexia, the oral language underpinnings of literacy, and Structured Literacy instruction to administrative team, staff, and parents;
- Build the training curriculum - the PI and the Pilot Implementation Team would build the training curriculum (or select a training program in existence) in collaboration with selected members of the LEA Team and the Pilot Advisory Board, select the screening and assessment instruments, and design the data collection system for professionals (e.g., belief and practices surveys) and students (e.g., screening, informal assessments, progress monitoring);
- Train participating teachers to administer and interpret the screening and informal diagnostic instruments;
- Provide participating teachers with a two-week training course prior to the beginning of the implementation school year; their time would be compensated;
- Training would be offered to kindergarten and first grade teachers the first year, and then to kindergarten, first grade, and second grade teachers thereafter;
- Training would be conducted by a team of professionals with professional development experience (e.g., experienced trainer and members of the LEA Team), and proven expertise in knowledge and practice related to students who are struggling readers, with specific expertise in a Structured Literacy Instructional approach; and
- The trainer(s) would also serve as mentors/coaches during the school year to support teachers as they teach in the classroom.

The goal of this comprehensive training program is to develop expert teachers and practitioners, who understand reading on many levels and gain the ability to be diagnostic/prescriptive in the way they view each student's skills and weaknesses. The training would help teachers use their knowledge and diagnostic skills to deliver effective reading instruction, with ability to trouble shoot when students falter in their progress as they follow the instructional program.

Components of the training curriculum

The Task Force believes that foundational knowledge of reading, as well as the practical application will result in improved reading achievement outcomes for students. Components of the training curriculum should include:

- The brain structure and function related to language development and how the language centers of the brain are the same centers activated during reading;
- The neurological "signature" of typical reading development and that of dyslexia;

- Cognitive processing profiles of children and how these profiles enhance or impede the acquisition of reading skills (attention, working memory, rapid automatized naming (RAN));
- The oral language underpinnings for language and reading to include the basics of phonology (phonemic processing and phonological awareness), semantics, syntax/grammar, morphology, alphabetic code knowledge (sound/symbol, orthography), syllable structure;
- Identification and assessment of young learners and older learners who struggle with reading, and to understand how to use assessment data to drive instruction;
- The elements and principles of Structured Literacy and how they link to oral language development, processing and reading acquisition;
- Teaching strategies and multisensory games and activities to support instruction;
- Language and literacy connections as they specifically relate to children who come from low socio-economic backgrounds and linguistically and culturally diverse families (English learners and students who speak nonstandard dialects of English), with specific discussion related to dyslexia and this population of learners;
- Use of video clips to demonstrate techniques to teachers during the classroom training portion, and use of mentor modeling to demonstrate teaching in the moment during the course of the school year;
- The processes and procedures for implementing a multi-tiered system of supports to target reading instruction to meet the needs of the individual student:
    - Practice teaching, perhaps during summer school or after school, with supervision from trainers;
    - Practice teaching (practicum) is part of the training program that occurs before the school year begins and that teachers would be compensated for practicum hours;
    - The materials would include an actual "tool kit" of materials for each teacher to be used during training and in the classroom; and
    - Once the school year begins, there will be monthly training/professional learning community discussions.
- Professional learning opportunities can be tailored to the preferences, schedules, and needs of the faculty:
    - After school meetings;
    - PL delivered by a content expert invited to speak on a specific topic;
    - "Flipped" classroom instruction to facilitate discussion within the teaching cohort; and
    - podcasts and webinars.
- Mentors will be available for daily coaching, as needed:
    - Teacher feedback will occur at least weekly; and
    - Mentors will facilitate regular and frequent meetings (to be determined by need, schedules, and staffing) with teachers.

The practicum component is an essential part of this Structured Literacy training model because it enables teachers to apply what they learn (Shulman, 1987) in the training classes, under supervision. A practicum model is used with other professions such as speech-language pathology, occupational therapy, physical therapy, and the medical professions, and is supported by the literature as a way in which teachers can develop their personal teaching competence (Smith and Lev-Ari, 2005).

The curriculum of this in-service training program has the potential to serve as a model for teacher training courses in undergraduate and graduate teacher training programs. School personnel report that undergraduate teacher preparation programs in Maryland do not fully prepare teachers to teach foundational reading skills to all students. Training programs do not provide undergraduate students with the practice and mentoring needed to address targeted populations of struggling readers. The training curriculum would work in tandem with a coaching model, to help teachers apply the knowledge and skills gained through the training. The training program would be designed with opportunities to collect data related to increase in teacher motivation to change instruction; interest in continuing to gain knowledge and skills to improve practice; as well as gains in actual knowledge and skills related to teaching reading. In addition, student achievement would provide additional data to support this embedded training/coaching model.

Procedures for the Identification of Student Need

The Task Force recommends a universal screening procedure and protocol as delineated in this Report in the section entitled, Identification of Dyslexia and Pre-dyslexia:[45] Methodologies & Age of Identification. Training to conduct screenings should be provided to all teachers and staff whether they administer the screenings and assessments or not. First, the screening and identification elements are aligned with the expectations for typical reading development, which teachers in this pilot program have discussed as part of their training. Second, the team of educators who work with the students need to have common vocabulary about which they discuss the students so they can determine groupings, gather materials, discuss progress monitoring strategies, etc. And finally, all educators who work with the students are expected to understand the data obtained from the screening and identification tools to make programming decisions. Personnel who should be trained to administer screenings and diagnostic assessments include:

- Classroom teachers
- Speech-language pathologists
- Special education teachers and/or Instructional Resource Teachers

[45] This is language used in the original legislation establishing the Task Force and refers to students who exhibit early warning signs that may predict difficulty with the acquisition of reading

- Dyslexia/reading coaches
- Mentor teachers
- Reading specialists
- School psychologists
- Teachers of speakers of other languages
- Paraeducators
- Building administrator(s)

Students Who Come from Low Socio-Economic Backgrounds and English Learners[46]

The Task Force invited experts to speak at meetings who were steeped in the scientific literature surrounding the academic achievement and reading acquisition of students who come from low socio-economic backgrounds and those who do not speak English as their primary language (English learners). The Task Force also reviewed scientific literature regarding the identification of learning disabilities and dyslexia in these populations of learners. The literature acknowledges the difficulty of separating the effect of English language learning from the presence of neurobiological substrates and cognitive processing issues that frame the causes of reading difficulties in students who do not speak English as a primary language (McCardle, Mele - McCarthy, Cutting, Leos, & D'Emilio, 2005).

A universal screener has the potential to be extremely beneficial to early identification of students who are at risk for the acquisition of reading who are English learners, who speak a non-standard dialect of English, and/or those who are economically disadvantaged. A screener would ascertain skills in phonological awareness and phonemic processing, rapid naming abilities as well as alphabetic code knowledge (i.e., sound/symbol association for vowels, consonants, consonant digraphs, and vowel teams). These skills have been cited in the literature as predictive of later reading success (Blachman, 1984; Catts, 1991; Catts & Hogan, 2003; Geva, Yaghoub-Zadeh, & Schuster, 2000; Páez, & Rinaldi, 2006).

These students require exposure to the general education curriculum and literacy rich environments.[47] If by the end of the first semester of kindergarten, concerns persist with the ability to meet curricular benchmarks for early reading standards, more targeted instruction should be initiated. For students who enter the school district in grades other than kindergarten,

[46] EL resource Power Point

[47] http://www.rti4success.org/sites/default/files/RTI_for_English_Language_Learners_4-29-10.pdf

results of the screener should be weighed against the demands of the grade level curriculum to determine whether monitoring is an appropriate strategy or if more targeted intervention should be initiated upon school entry.

The Pilot would address English learners in the following way:

- All EL students will be screened using the WIDA-ACCESS for English Language Learners Placement Test (W-APT) -- a one-time screener used to identify students as English Learners.
- Results of this screening will be used to help with placement within the flexible grouping paradigm used in this pilot.
- Concurrently, the ELs will also be assessed using the Universal Screener for early reading skills as outlined in this Report.
- EL students should be placed in a reading instructional group based upon the language proficiency data *and* universal screening data. It should not be assumed that ELs would automatically be placed in a group comprised of children who demonstrate the most skill deficits.
- Teachers of English for Speakers of Other Languages (ESOL) would participate as part of the educational team to evaluate language proficiency, universal screening data, and to assist with student grouping and educational programming decisions.
- Teachers would assess student progress through progress monitoring procedures decided upon at the onset of the pilot program (such as that contained in the DIBELS tool) to ensure appropriateness of instructional programming and instructional grouping.
- ELs require exposure to the general curriculum and literacy rich environments. If by the end of the first semester concerns persist with a student's ability to meet curricular benchmarks, more targeted instruction should be initiated.

In addition, there are many children who speak English as a first language, but they speak a non-standard dialect of English. Thus, these speakers present *within* language differences rather than across two languages. The presence of dialect differences has complicated attempts to identify children who are language disordered, and similarly impacts identification of reading disorders. This is particularly true for African American children who use African American English. African American English is the most studied dialect of American English and used by most African Americans in the United States (Washington, Patton-Terry, & Seidenberg, 2013). Identification in this large population of students is further complicated by the fact that many of these children are disproportionately poor. The presence of differences associated with poverty and those associated with dialect differences make it difficult to differentiate African American children who are having difficulty as a result of poverty and sociolinguistic differences from those with true reading disabilities. Nationally, though African Americans may be overrepresented in the LD classification (Cortiella, & Horowitz, 2014), very few African American children are identified as dyslexic (Brown, M., Sibley, D., Washington, Rogers, Edwards, MacDonald, & Seidenberg, 2015; Washington, Patton-Terry, & Seidenberg, 2013).

The Task Force believes that a conversation about improving reading for all students in Maryland should highlight the needs of all underserved populations. To that end, teacher

training in this pilot program will include what we have learned from the current science about this population of learners to ensure the identification and assessment procedures that accurately assess their reading skills and needs.

Program Design and Classroom Structure

The pilot program for a dyslexia education program is designed for grades kindergarten through grade three. The program is designed in a progressive model of implementation. The following schedule is suggested, which would be modified by the PI and the Implementation Team as necessary:

Year prior to Pilot implementation:

- Implement global training for all teachers in the school;
- Collect PARCC data from third and fourth grades as baseline for comparisons in pilot and non-pilot schools;
- Administer Knowledge and Skills teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;[48]
- Administer Practice and Belief teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer parent Knowledge and Satisfaction survey to parents of students in kindergarten through fourth grade in pilot and non-pilot schools;
- Collect baseline reading data for students in kindergarten and first, second, and third grades using the universal screening data and a normed assessment instrument;
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools in kindergarten through fourth grade; and
- Collect data that quantifies the number of students who qualify for special education in pilot and non-pilot schools because of reading difficulties that align with dyslexia in kindergarten through fourth grade.

Implementation Year 1:

- Train kindergarten and first grade teachers;
- Implement program for kindergarten students;
- Collect screening and informal diagnostic data and progress monitoring data throughout the school year for kindergarten students;
- Collect screening and progress monitoring data for first through fourth grades in pilot schools and non-pilot schools;

[48] Sources for teacher Knowledge and Skills assessment could be the Foundational Reading Test used by five states, CT, MA, NH, NC, and WI or the Structured Literacy Certification Exam offered by the International Dyslexia Association

- Collect PARCC reading data for third and fourth grades in pilot and non-pilot schools
- Administer Knowledge and Skills teacher survey to teachers in pilot and non-pilot schools;
- Administer Practice and Belief surveys to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer parent Knowledge and Satisfaction survey in pilot and non-pilot Schools to parents of students in kindergarten through fourth grade I pilot and non-pilot schools;
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools because of reading difficulties that align with dyslexia; and
- Collect data that quantifies the number of students who qualify for special education in pilot and non-pilot schools because of reading difficulties that align with dyslexia.

Implementation Year 2:

- Continue training for skills related to targeted instruction with kindergarten and first grade teachers;
- Train second grade teachers;
- Implement program for kindergarten and first grade students;
- Collect screening and informal diagnostic data, and progress monitoring data throughout the year for kindergarten and first grade students in pilot and non-pilot schools;
- Collect screening data and progress monitoring for grades two through four in pilot and non-pilot schools;
- Collect PARCC reading data for third and fourth grades in pilot and non-pilot schools;
- Administer Knowledge and Skills teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Administer Practice and Belief teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer Knowledge and Satisfaction parent survey to parents of students in kindergarten through fourth grade in pilot and non-pilot schools;
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools because of reading difficulties that align with dyslexia; and
- Collect data that quantifies the number of students who qualify for special education in pilot and non-pilot schools because of reading difficulties that align with dyslexia.

Implementation Year 3:

- Continue training for skills related to targeted instruction with kindergarten, first, and second grade teachers;
- Continue implementation of program for kindergarten and first grade students;
- Implement program for second grade;
- Collect screening and informal diagnostic data, and progress monitoring data throughout the year for kindergarten, first, and second grade students in pilot and non-pilot schools;
- Collect screening and progress monitoring data for grades three and four in pilot and non-pilot schools;
- Collect PARCC reading data for third and fourth grades in pilot and non-pilot schools;
- Administer Knowledge and Skills teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Administer Practice and Belief teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer parent Knowledge and Satisfaction survey to parents of students in kindergarten through fourth grade in pilot and non-pilot schools;
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools because of reading difficulties that align with dyslexia; and
- Collect data that quantifies the number of students who qualify for special education in pilot and non-pilot schools because of reading difficulties that align with dyslexia.

Post-implementation Year 4:

- Collect screening and progress monitoring data for the cohort of students who were involved in the program and for first, second, third, and fourth grade students in pilot and non-pilot schools;
- Collect PARCC reading data for third and fourth grades in pilot and non-pilot schools;
- Administer Knowledge and Skills teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Administer Practice and Belief teacher survey to teachers in kindergarten through fourth grades in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer parent Knowledge and Satisfaction survey to parents of students in kindergarten through fourth grade in pilot and non-pilot schools; and
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools because of reading difficulties that align with dyslexia.

Post-implementation Year 5:

- Collect screening and progress monitoring data throughout the year for kindergarten through fifth grade students in pilot and non-pilot schools;
- Collect PARCC reading data for third and fourth grade students in pilot and non-pilot schools;
- Administer Knowledge and Skills teacher survey to teachers in kindergarten through fourth grade in pilot and non-pilot schools;
- Administer Practice and Belief teacher survey to teachers in kindergarten through fourth grade in pilot and non-pilot schools;
- Ongoing parent training, once or twice per year;
- Administer parent Knowledge and Satisfaction survey to parents of students in kindergarten through fourth grade in pilot and non-pilot schools;
- Collect data that quantifies the number of students referred for special education eligibility in pilot and non-pilot schools because of reading difficulties that align with dyslexia; and
- Collect data that quantifies the number of students who qualify for special education in pilot and non-pilot schools because of reading difficulties that align with dyslexia.

Teacher Knowledge and Skills and Practice and Belief surveys are included each year to measure data trends over the course of the pilot program, and should be compared to that of teachers not engaged in the pilot program and who have not had the training. This data would evaluate the effectiveness of the professional development. The data could be correlated with student outcomes, and can serve to help teachers and administrators not engaged in the pilot to see the value of training, coaching, and implementing a Structured Literacy approach to instruction for beginning readers and struggling readers. The reauthorized Every Child Succeeds Act (ESSA) requires accountability for teachers in schools from both the State Education Agency (SEA) and LEA. The Pilot offers a way to address accountability, particularly for underserved populations and students with learning differences.

Additionally, it is important to review teacher knowledge and skills and practice and belief data, and students' outcome data after their involvement in the pilot program ends. Would teachers maintain and/or improve their knowledge and skills? What would practice and belief data look like without the benefit of training and coaching? What would student outcomes look like when teachers are not receiving the support, and/or may not be using the same instructional approach because they are not obligated to teach according to the tenets of the pilot program? What would parent satisfaction data look like for years when the Pilot no longer is applicable in their student's grade level? Other states such as Ohio and Pennsylvania have reported improved metrics overall based on their pilot program outcomes.

The purpose of data collection in Post-implementation Years 4 and 5 is to study maintenance of skills and trends in PARCC scores to help evaluate the efficacy of the program. That being said,

if data collected during the study reveals that students are learning to read with greater success, are reaching benchmarks with a greater degree of success than previous years in that setting, or compared to schools not implementing the pilot, then certainly the practices outlined for this program could be adopted in other schools even before the pilot program is completed.

Chart3. Proposed Pilot Implementation Schedule. (See narrative for more details.)

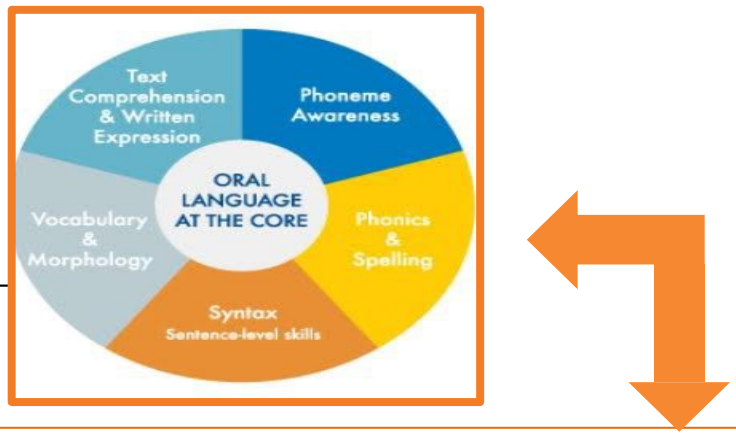
	Staff Training	Grade Level Implementation	Pilot Data Collection	Other Data Collection
Year prior to Pilot	Global training, all staff in a school Targeted training for kindergarten and first grade teachers, including opportunity for practicum Parent introductory training	No student instruction, just teacher, parent, and administrator training	Baseline reading data for K-3, pilot and non-pilot schools Teacher and parent surveys	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special ed referrals Number of students who qualify for special education services
Year 1	Summer training and practicum for K and grade 1 teachers Ongoing parent training, once or twice per year	Kindergarten	Universal Screener, progress monitoring, K-4, pilot and non-pilot. Teacher and parent surveys, K – 4, pilot and non-pilot schools	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special ed referrals Number of students who qualify for special education services
Year 2	Summer training and practicum for second grade teachers, continue training for and K - 1 teachers Ongoing parent training, once or twice per year	Kindergarten Grade 1	Universal Screener, progress monitoring, K -4, pilot and non-pilot. Teacher and parent surveys, K – 4, pilot and non-pilot schools	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special ed referrals Number of students who qualify for special education services
Year 3	Continue training K-2 teachers Ongoing parent training, once or twice per year	Kindergarten Grade 1 Grade 2	Universal Screener, progress monitoring, K -4th grade, pilot and non-pilot. Teacher and parent surveys, K – 4, pilot and	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special ed referrals Number of students who qualify for special education services

	non-pilot schools	
Post - Year 4	Universal Screener, progress monitoring, K -4 grade, pilot and non-pilot. Teacher and parent surveys, K – 4, pilot and non-pilot schools	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special ed referrals Number of students who qualify for special education services
Post – year 5	Universal Screener, progress monitoring, K-4 grade, pilot and non-pilot. Teacher and parent surveys, K – 4, pilot and non-pilot schools	PARCC testing data grades 3 and 4, pilot and non-pilot schools Number of special education referrals Number of students who qualify for special education services

Sequence of grade level basic reading decoding skills

The pilot study was designed with specific goals in mind for the acquisition of a core set of basic skills in kindergarten through second grade, knowing that there will be students who exceed the goals. Teachers will be trained as diagnostic/prescriptive teachers which will benefit the struggling student as well as the advanced student: set instruction at the student's level of skill, and raise the level just enough to extend their learning for growth. This is a continuous process, integrating diagnostic/prescriptive teaching skills and progress monitoring (See Chart 4 on page 97).

See the Best Practices section of this Report for more detailed information regarding a Structured Literacy approach to reading instruction. The scientific literature has demonstrated the need for explicit instruction in the oral language precursors as well as in the specific reading skills that are contained with the concept of "literacy", as illustrated in the diagram below. [49]



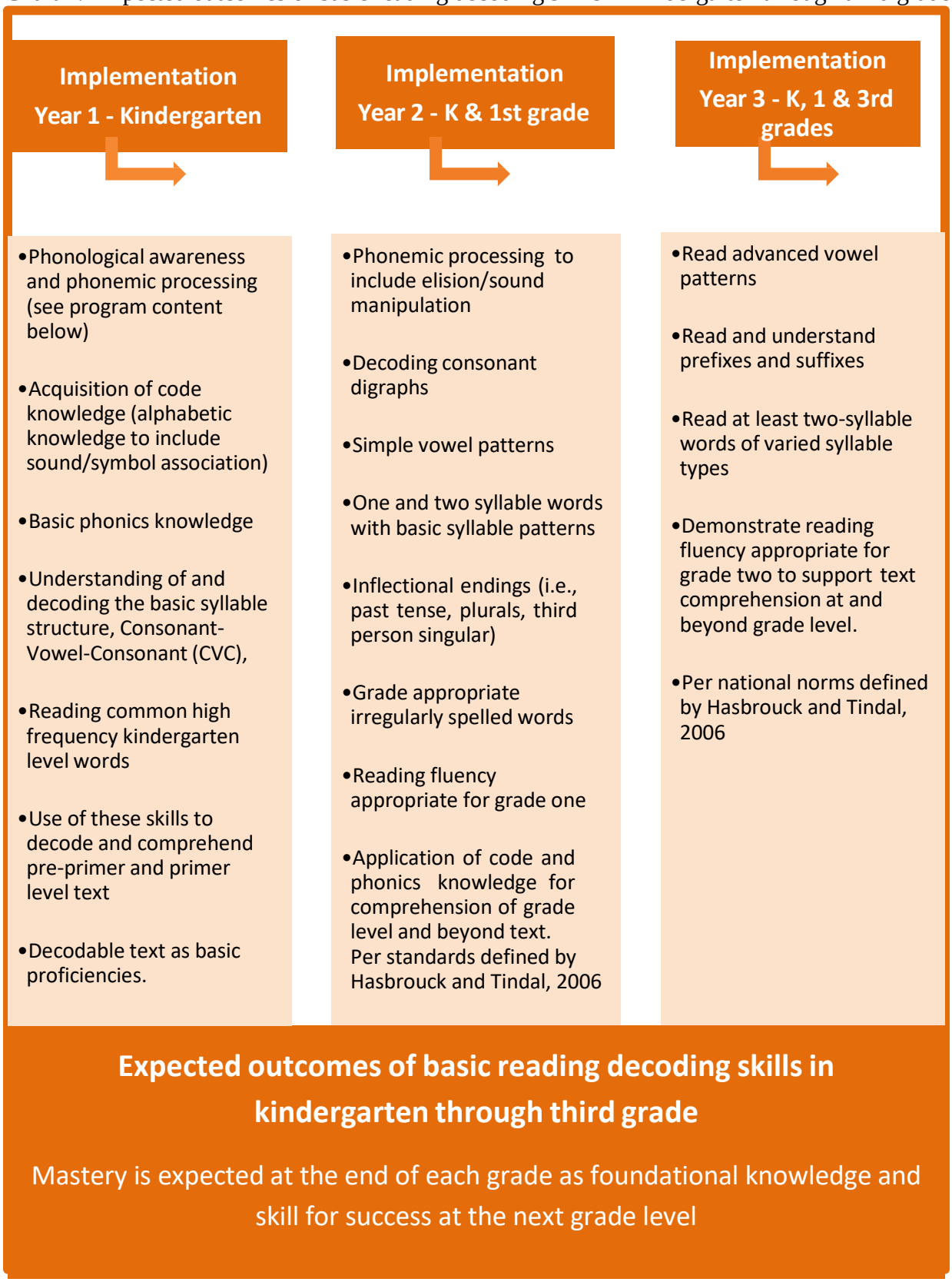
[49] http://www.literacyhow.com/, Margie Gillis, Ph.D.

The human brain is preprogrammed to understand and use oral language during typical development. The brain is not hard-wired for reading as a natural developmental occurrence. For most individuals, reading must be explicitly taught. When children and adults struggle with their ability to sound out words, neuroimaging studies have demonstrated that the brain's activity is markedly different from the activities recorded in the brains of typically developing readers and proficient adult readers. The areas of difference involve areas of the brain that are critical for oral language. Therefore, it is commonly accepted that reading is a language activity, and successful reading depends upon the integrity of the language centers in the brain.

(Catts, 1989, 1993; Kamhi & Catts 2002, 2012; Lyon, Shaywitz & Shawitz, 2003; Puranik, Petscher, Otabia, & Catts, 2008; Rimrodt & Cutting, 2007; Storch & Whitehurst, 2002)

It is acknowledged that students will enroll in kindergarten through grade two after the pilot has started. Students new to the school at the time of implementation in their grade level of this pilot should be screened and assessed according to the pilot universal screening and informal diagnostic assessment guidelines and placed in instructional groupings and instructed based on their data. By Year 3, three grade levels, kindergarten, first and second grades, will be receiving pilot program instruction, within the parameters of pilot program staffing and structure.

Chart 4. Expected outcomes of basic reading decoding skills in kindergarten through third grade



Structure for Student Grouping and Embedded Multi-Tiered System of Supports for Reading

The pilot is envisioned to provide a system of flexible, instructional, homogeneous groupings, with a multi-tiered system of supports embedded in the system. In other words, students who demonstrate skill deficits on the universal screener and diagnostic assessment tools would receive reading instruction with added specificity and intensity and at a slowed pace as their Tier 1 instruction with students who exhibit similar skills in their small instructional group. Students who demonstrate grade level or better oral language precursors and beginning reading skills would receive instruction with their instructional peers in larger groupings. This would be considered Tier 1 instruction since all students would be receiving the same progression of standards though specificity, intensity, and pace would be adjusted depending upon screening data and instructional grouping. Tier 2 intervention would be implemented for students who demonstrate difficulty learning specific skills. Progress monitoring data along with informal diagnostic data would continue to be collected to ensure rate of progress. Tier 2 intervention would reinforce skills taught that day, and possibly prepare students for material that will be introduced to their Tier 1 instruction group the next day.

The embedded multi-tiered system of instruction is outlined on the next two pages and in Chart 5.

Tier 1 Instruction

1. Instruction for all students uses a Structured Literacy approach to teaching reading
2. Instructional groupings are determined based on screening data plus informal diagnostic and progress monitoring data, allowing Tier 1 instruction to be at a proper intensity and pace for students
3. Tier 1 instructional groupings are homogenous with frequent and periodic review of student placements to enable a student's grouping to be changed as needed:
    - *Enrichment*
    - *Benchmark*
    - *Strategic*
    - *Intensive*

Tier 2 Intervention

1. Designed for students who receive Tier1 Structured Literacy Instruction and are identified through progress monitoring and informal diagnostic data to have areas of weakness in some aspect of Tier 1 instruction.
2. Instruction is targeted and supplemental, delivered to an individual student or a small group of students needing similar skill development.
3. Tier 2 intervention would reinforce skills that are taught that day in Tier 1 instruction.

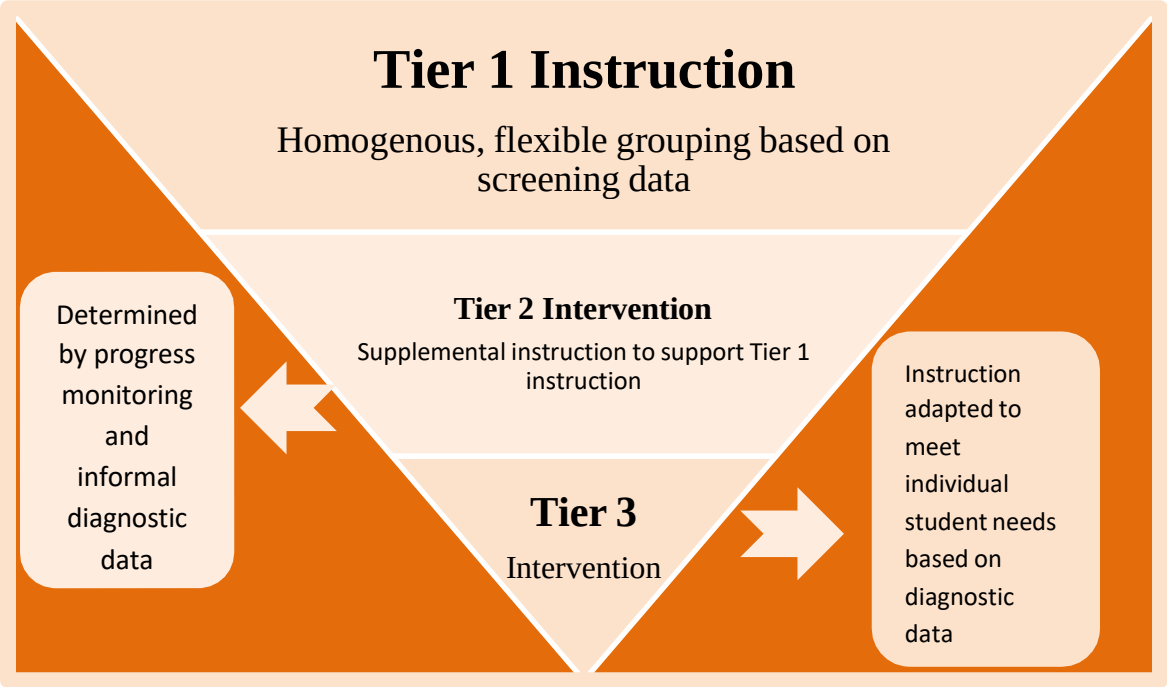
Tier 3 Intervention

1. Designed for students that have not responded to Tier 1 or Tier 1 with Tier 2 supplementary instruction.

2. The need for Tier 3 is based upon data from progress monitoring and informal diagnostic data, and perhaps formal, standardized diagnostic data.

3. Tier 3 is adapted to address individual student needs.

Chart 5. Embedded multi-tiered system of instruction



The inverted pyramid reflects reduced numbers of children at each tier level.

Data Collection and Analysis

Data related to students' foundational oral language and reading skills will be assessed and utilized in a uniform way:

- Screening and informal diagnostic data from students across all classrooms within the grade are gathered and used to place students in instructional groupings according to need across the grade level for part of the English/Language Arts block.

- Informal diagnostic data would be utilized to form instructional groups according to area(s) of need. Group size and intensity of instruction would be addressed through data obtained from screening and assessment instruments.

- Students who enter the pilot program with an existing IEP will continue to receive services and supports as outlined by their IEP. However, they will also be incorporated into the pilot as specified throughout this document. Special Education services will not supplant the services included in this pilot program. Rather, Special Education services will supplement the Structured Literacy instruction received as outlined by the pilot program.

- All participating students' parents will be notified of identification, screening, informal diagnostic assessments, and progress results. Parents will be included in the decision-making process as determined by the Pilot Implementation Team and the LEA Team. Parents are an important part of the process and must be included in communications.

Pilot Program Professional Staffing Model

When the Task Force envisioned implementation of the Pilot in a public school setting, certain assumptions were made with respect to number of classes within a grade level, the average number of students in a class, the number of teachers, special educators, speech-language pathologists, and para-educators. These assumptions were:

- There are four teachers in an average grade with an average of 25 students in each class;
- There may be one special educator for grades kindergarten through grade three;
- There may be one speech-language pathologist in the building who may be in the building daily, but that is not always the case;
- There may be an ESOL teacher available;

- There are para-educators available, perhaps for kindergarten, but not necessarily for first grade;
- There may be one psychologist in the building, but likely this professional is not in the building daily;
- There may be a reading specialist in the building;
- There may be district level teacher mentors/coaches who are available on a limited basis to classroom teachers; and
- There would not be a building level "expert" on dyslexia.

The pilot design assumes that additional personnel would have to be added to the pilot program to meet the instructional and coaching requirements. The design of the pilot is based upon collaboration among a variety of school professionals engaging in inter-professional practice (IPP). IPP refers to "an activity that occurs when two or more professions learn about, from, and with each other to enable effective collaboration and improve outcomes for individuals and families whom we serve. Similarly, IPP occurs when multiple service providers from different professional backgrounds provide comprehensive healthcare or educational services by working with individuals and their families, caregivers, and communities- to deliver the highest quality of care across settings."[50] This pilot program utilizes an IPP model of professional collaboration:

- All professionals receive the same amount and intensity of professional development to deliver reading instruction aligned with a Structured Literacy approach to teaching reading;

- Professionals would be assigned to instructional groupings that reflect the needs of students that align with their professional training, certification, and licensure. For example, a speech-language pathologist would teach a group of children who demonstrate significant oral language difficulties that are associated with the acquisition of reading. An ESOL teacher would teach an instructional group that includes ELs;

- This varied group of professionals would engage in professional conversations at monthly training meetings, enriching the discussion with multiple perspectives and areas of expertise, as well as in their weekly professional learning community meetings to problem solve specific difficulties an educator may be experiencing in their instruction.

[50] http://www.asha.org/Practice/Interprofessional-Education-Practice/

Program design requires the following personnel given an assumption that there are 100 students in a grade level for each language arts block of instruction:

- 5 classroom teachers
- 1 special education teacher and/or instructional resource teacher
- 1 speech-language pathologist (SLP)
- 1 ESOL teacher for consultation or for daily instruction, depending upon the enrollment of EL students – if ESOL teacher does not provide daily instruction then provide an additional general education teacher)
- 3 para-educators
- 1 coach per grade for the first year

The rationale for the above staffing is based upon the following hypothetical scenario:

- Three general education teachers and two paraprofessionals for 60 students out of 100 who would most likely demonstrate grade appropriate oral language foundational and beginning reading skills;
- Two general education teachers, one special educator, one SLP, and either an ESOL or general education teacher for smaller instructional groupings, addressing the needs of students whose screening data reflect skill lags or deficiencies, for the remaining 40 students;

For the 60 students who do not need more specified or intensive instruction:

- "Benchmark" groups of learners who are at grade level expectations in their screening data;
- "Enrichment" groups of learners whose screening data revealed advanced skills; and
- These students would have a 12:1 teacher student ratio with three teachers and two para-educators.

For the 40 remaining students:

- There would be some who are "strategic", or those who would demonstrate mild skill deficits based upon screening data; these groupings would have up to 8 students in a group with one teacher;
- There would be some students who are "intensive", or those who would demonstrate moderate to severe foundational skill deficits, and those groupings should have up to 4 students with one teacher; and
- All student groupings would be flexible and are dependent upon student needs, based on progress monitoring. Students can move to different instructional groupings based upon data that shows progress or slow rate of progress.

This is an aggressive staffing schedule for the first year of the pilot but has the potential to reduce the number of students with foundational skill deficits at the end of the school year. If the need for small instructional groupings is reduced in subsequent years, then staffing levels can be reduced and modified. Staffing for Year 2 of the pilot would be dependent upon outcomes from Year 1, and staffing for Year 3 would be based upon outcomes of Year 2.

English/Language Arts Block Design

The English/Language Arts (ELA) block will be 120 minutes long, homogenous groupings* consisting of:

- 60 minutes of phonological awareness, alphabetic code instruction, decoding, spelling (code instruction)

- 60-minute lesson for remaining ELA components:
  - oral language such as vocabulary instruction
  - sentence structure
  - language of experience writing
  - grade level literature and comprehension activities
  - handwriting instruction

This is a suggested lesson format, but as students' progress in their skills, time allocation must be adjusted based upon progress monitoring data.

***** The Pilot Program is designed for homogeneous groupings so teachers can hone their objectives to the group needs. There is an option to keep the 60-minute code instruction block the only homogenous block, with students returning to their home-base classroom, but then changing groups adds transition time, which impacts time on task for instruction.

Progression of the Pilot Program through year three:

- In Year 1, only one block of 120 minutes pilot ELA occurs

- In Year 2, two blocks of pilot ELA occur, grades K and 1

- In Year 3, three blocks of pilot ELA occur, grades K, 1, and 2

The additional Pilot staffing, beyond staffing for typical classroom instruction (i.e., typical classroom staffing would be one teacher for 25 students), would be utilized during the 60 minutes of code instruction. In Years 2 and 3, ELA instruction blocks would be scheduled at the same time (e.g., from 9AM to 11AM) but the time for code instruction would be staggered within that time block. In this way, the additional personnel assigned to the pilot would be working in the pilot just in the morning and would be available for other assignments for the rest of the school day. See Chart 5 below.

Chart 5. Example of staggered staff scheduling for Structured Literacy component of the ELA block

Block	Kindergarten	Grade 1	Grade 2
9-10AM	X		
10-11AM		X	
11-12AM			X

Cost estimates for additional personnel and the training program are included at later in this section.

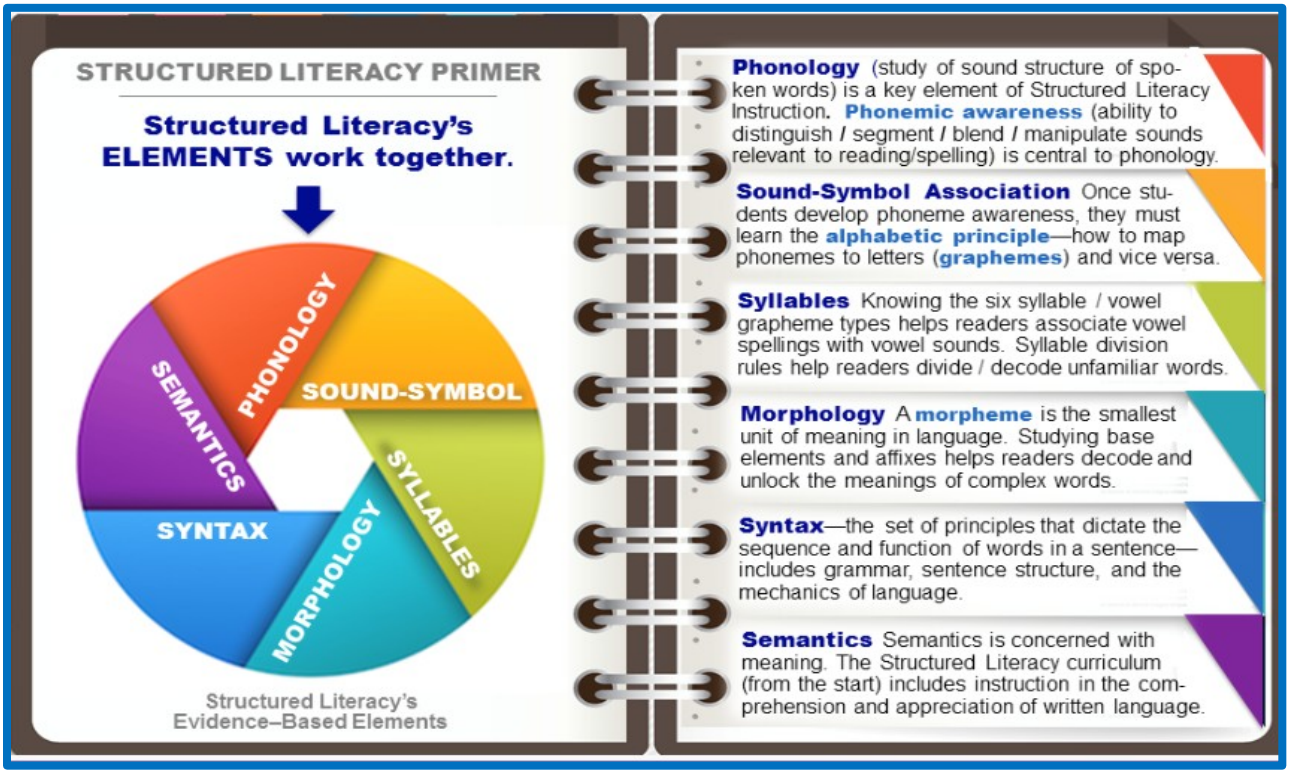
Instruction and Intervention: Elements and Principles of Structured Literacy

Principles of instruction

Structured Literacy Instruction is systematic, sequential, explicit, direct, cumulative, intensive, and uses multisensory techniques. Structured Literacy Instruction begins with a sequence of systematic instruction in phonological awareness, and moves along the sequence to teach alphabetic code knowledge (e.g., letter/sound associations, phonics, orthography), the structure of language (i.e., morphology, syntax and grammar), semantics (oral and print language comprehension), and written language with an emphasis on spelling and sentence structure in the early grades, with explicit and process-based teaching of narrative and expository writing in later grades. Structured Literacy incorporates the five components of effective reading instruction as outlined by the National Reading Panel in 2001[51] (phonemic awareness, phonics, reading fluency, guided oral reading, vocabulary instruction, and reading comprehension) and ensures that the instruction is systematic, cumulative, explicit, and multisensory.

[51] https://www.nichd.nih.gov/research/supported/Pages/nrp.aspx

Elements of Structured Literacy



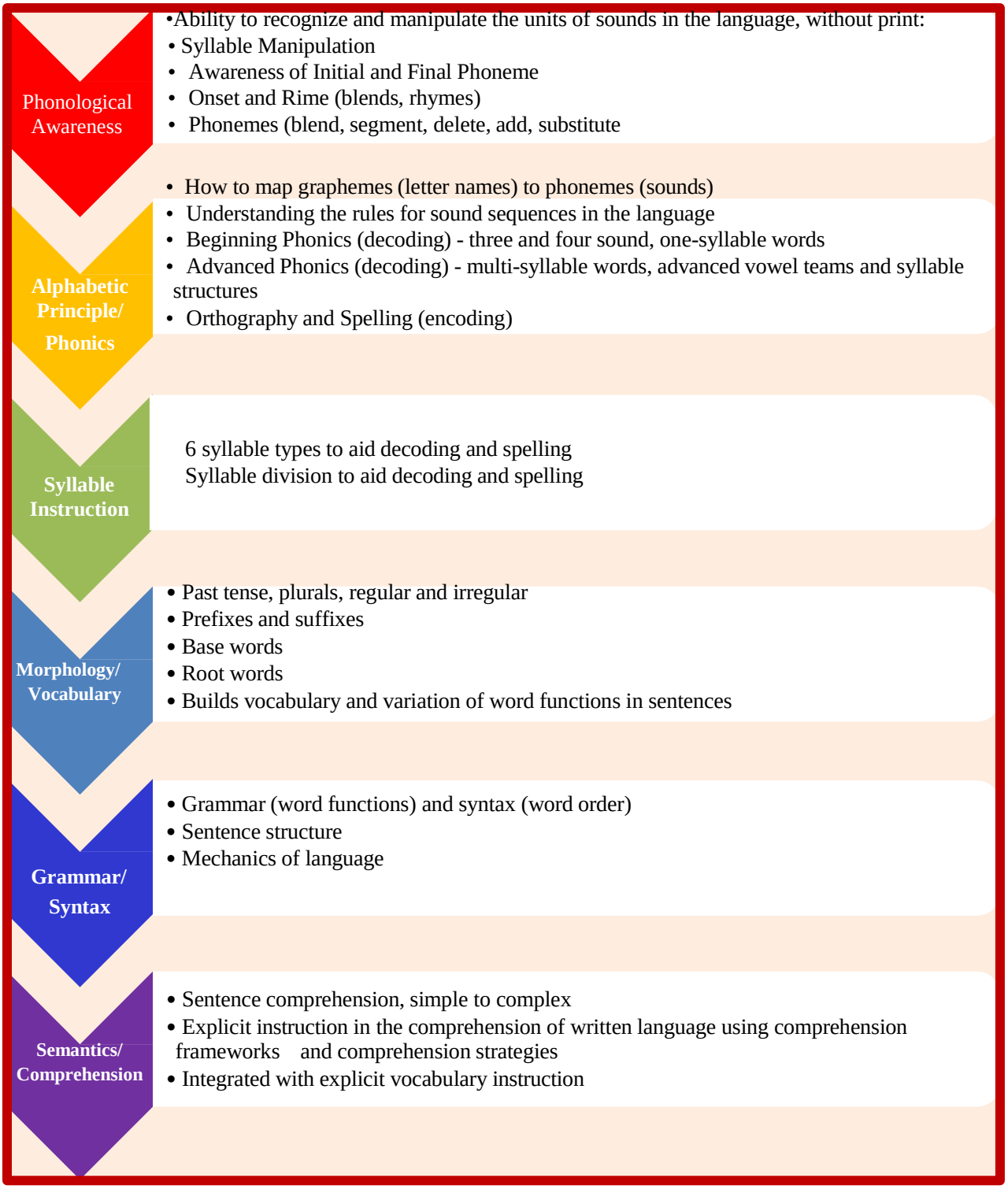
International Dyslexia Association, https://dyslexiaida.org/what-is-structured-literacy/

Components of Structured Literacy Instruction [52] [53]

An outline of the components of Structured Literacy Instruction with sample objectives is provided in Chart 4, but does not delineate a full Structured Literacy curriculum. Resources that are fully illustrative of a robust Structured Literacy approach to teaching reading are included in the footnotes. Just acknowledging the incorporation of the elements in reading instruction reported by the National Reading Panel does not constitute implementing a Structured Literacy approach to teaching reading. According to Richenbrode and Walsh (2013), despite the National Reading Panel's recommendations, reading instruction in our nation's classrooms still does not incorporate all of the necessary components.[54] See Chart 6 for an outline of the learning objectives within the major elements of a Structured Literacy approach to teaching reading.

[52] http://everyonereading.org/about/about-multisensory-structured-language-education/
[53] http://www.ldonline.org/article/6332/
[54] http://www.aft.org/sites/default/files/periodicals/Rickenbrode_Walsh.pdf

Chart 6. Elements of a Structured Literacy Approach to Reading Instruction



True Structured Literacy instruction must include a specific set of principles of instruction:

Multisensory: Instruction that includes presentation of information to multiple sensory modalities, (i.e., visual, auditory, kinesthetic, and tactile), simultaneously, to enhance memory and learning.

Systematic and Cumulative: Employing a system of instruction that follows a sequence of skills that reflect the logical order of progression of the rules of the language. Instruction begins with easiest skills and progresses to most difficult, with mastery require at each level as a prerequisite to advance to the next level or skill set.

Direct Instruction: Specific skills are taught directly, with opportunities for practice and immediate corrective feedback.

Diagnostic Teaching: Using data to drive instruction; student performance dictates the content of a subsequent lesson. When students do not master a skill or concept a diagnostic teaching framework requires determining what foundational skills should be taught to bring the skill in question to *mastery*.

Synthetic and Analytic Instruction: Multisensory language programs include both synthetic and analytic instruction. Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole. Analytic instruction presents the whole and teaches how this can be broken down into its component parts.

When implementing a Structured Literacy approach to reading instruction, mastery of language and phonics structures are critical. Striving for 100% mastery is the goal phonological awareness, and letter names and sounds. For single word reading, 90% or higher accuracy is desired. For connected text, Hasbrouck and Tindal norms (2006) call for 95% accuracy. Instruction includes spiral review of learned targets at least weekly.

Parent Engagement

An important component of the Pilot is parent understanding and involvement. The Task Force solicited parent testimony and information through public comments during the

public commentary portions of the Task Force public meetings and through anonymous parent surveys. While many parents were well informed about what their child needed and what the school system was or was not providing, many were not well informed. The Task Force believes that parents should understand the instruction and supports offered to their children. Additionally, since the Pilot will be implementing a different instructional framework for reading, utilizing a new way of gathering information about students' skills, and utilizing that data for instructional groupings, it is important that all parents in a participating school be well informed about:

- The purpose and design of the Pilot
- The Universal Screening procedures and protocol
- Basic information about reading and a Structured Literacy framework
- Instructional goals and objectives and the methodology and teaching strategies used to implement the program
- The embedded multi-tiered system of supports

There are many ways to engage and empower parents to be partners in their child's education. While strategies to engage parents were not a specific topic during the Task Force proceedings, members did agree on the need to work closely with parents. One innovative way to work with parents has come to the forefront: *ParentCamp*.[55] The ParentCamp experience, modeled after *EdCamps* for teachers, is an 'unconference' opportunity for parent leaders, educator connectors, and community leaders to come together and model the following four core beliefs:

- All parents have dreams for their children and want the best for them
- All parents have the capacity to support their children's learning
- Parents and school staff should be equal partners
- The responsibility for building partnerships between school and home rests primarily with school staff, especially school leaders

ParentCamp is unlike other 'conferences' as the goal is shared dialogue and is based on the premise that everyone in the group has expertise to share. Therefore, there are no presenters, facilitators responsible for ensuring that everyone shares 'air time' equally, to prompt discourse through open-ended questions, and to keep the conversation flowing.

ParentCamps could be hosted by the PTA, the school district, and/or the Parent's Place of Maryland in conjunction with interested parent groups as each school site. Building in a ParentCamp component to the Pilot Program would be a forward thinking way to engage with parents toward a common goal – the development of strong literacy skills in all students in Maryland's public schools.

[55] ParentCamp retrieved from**:** http://parentcampusa.weebly.com/what-is-parentcamp.html .

Summary

The ultimate goal of the Pilot is to provide a scalable system of reading instruction within a school building that results in improved reading outcomes for all students, including struggling readers and those identified as having dyslexia through universal screening, utilization of a Structured Literacy approach to reading for all students, flexible homogeneous instructional groupings, and data-driven decisions for instructional programming based upon screening, assessment, and progress monitoring results. The Pilot will demonstrate the need for and the benefit of early identification of students who struggle with the acquisition of reading, and specifically, those students whose reading challenges align with the characteristics of dyslexia. The Task Force envisions the Pilot to be a model for effective reading instruction for all students, including those early learners who are at-risk for reading challenges and failure.

The Pilot and best practice documents prepared by the Task Force will provide pathways to early identification and effective interventions that help all students learn to read, spell, and comprehend text. State pilot programs, and comprehensive dyslexia state mandates in Ohio, Illinois, Washington, Oregon, California, Arkansas, Mississippi, detailed in Part I of this report, are a testament to the human toll of illiteracy, and the urgency needed to find solutions and close the reading achievement gap.

The Task Force report provides evidence and next steps to achieve a scalable, equitable reading instruction model for Maryland public schools. The Task Force would like to acknowledge and thank the Maryland State Department of Education for its collaborative efforts to find solutions to prevent and close the reading gap in Maryland. Addressing reading failure must be a priority for Maryland elected officials particularly with regard to funding – the legislature and Governor Hogan's office can provide the ways and means to ensure educational equity for all students by narrowing the reading gap and reducing the school to prison pipeline.

PILOT PROGRAM FUNDING

"Determine the Feasibility of Funding a Dyslexia Education Program through the State Department of Education or Alternative Funding Mechanisms and Sources or both, including Researching Grant Opportunities"

Chapter 235 (SB 823, 2016) required the Task Force to determine the feasibility of funding a dyslexia education program through:

a. The Maryland State Department of Education and/or
b. Alternative Funding Mechanisms and Sources and
c. Grant Opportunities

Dyslexia Pilot Preliminary Cost Estimate and Funding

Superintendent Scott Smith, Task Force member and Superintendent of St. Mary's County Public Schools, presented an array of potential funding sources, summarized below.

Superintendent Smith's handouts are available on Livebinders.com under the tab Funding Strategies, 9.24.15. Superintendent Smith also developed a rough pilot program budget based on a three year pilot to guide funding efforts. The preliminary budget was developed and presented prior to finalizing the Pilot Structure, which now includes a 6 year pilot that includes a pre-year for teacher training and a five-year screening and intervention model for grades K-2 that includes three cohorts of students. Additional funding considerations are included in the funding analysis below to reflect the potential needs of a 6 year pilot program.

PILOT PROGRAM COST ESTIMATE

The best estimate of a cost for the six-year Pilot, including six schools in two LEAs, is approximately $1.4 million per school or $2.8 million for two schools. Most of the costs revolve around additional staffing and staff training stipends for 24 teachers. Included in the model is training for three master teachers who become trainers to sustain the training beyond the completion of the Pilot. Also, after the completion of the Pilot, the number of teachers who would need to be trained becomes markedly reduced, therefore markedly reducing costs. Additionally, as the Pilot progresses, the Project Investigator, the LEA Team, and the Pilot Advisory Board will assess staffing needs quarterly to make projections for staffing needs for the following school year. It is anticipated that as students demonstrate improved reading skills in comparison to prior years in the Pilot school and in non-pilot schools, the need for strategic and intensive level groupings would decrease, therefore decreasing staffing needs. The budget forecast below assumes full staffing, without reductions as the Pilot progresses. The projected

costs are at the high end of projections. When the specific instructional program is selected, the cost of materials and training can be identified and tracked with precision. Training and material costs are estimates based on the costs for off-the-shelf reading intervention programs.

Sustainability after the completion of the Pilot is critical. The Task Force advises that a sustainability plan be built into the PI's Plan for Implementation. At the very least, a train-the-trainer model should be incorporated into the plan so current district personnel can continue to train educators in his/her building and within the LEA.

The costs for each of the LEAs fall into 4 general categories:

1. Training and practicum;
2. Teaching staff salaries and stipends;
3. Program materials; and
4. Administrative: collecting, analyzing data, and publishing the results of the pilot program.

Teacher training and staff costs include:

- Monthly In-service Meetings, nine total, two hours;
- The Summer Institute will take place the summer before the pilot program begins. The kindergarten and first grade general education teachers, as well as special educators, instructional resource teachers, teacher mentors, speech language pathologists and administrators will attend a two-week course to provide instruction in structured literacy elements and principles, administration and interpretation of screening and informal diagnostic data. The costs for this 45-hour course will include the trainer, teacher per diem pay and teaching materials for each participant; and
- Practicum. Teachers will have the opportunity to engage in supervised practice teaching, 15 hours over several weeks, with student(s) who struggle with reading, either one-one, or with a small group. Teachers will work with students in summer school or after school. Teachers are paid for their practicum hours.

Abbreviated Budget Table*

	Pre-Year	Imp. Y1	Imp. Y2	Imp Y3	Post Y4	Post Y5	6 Yr Total
Additional Staff		301,820	404,750	404,750			
Administrative	87,000				15,000	15,000	
Practicum		10,608	10,608	10,608			
45 hr. course		22,033	22,033	22,033			
Monthly meetings		13,603	14,594	15,583			
Materials		2,200	2,200	2,200			
Totals	87,000	350,264	454,184	455,174	15,000	15,000	1,377,493

*See Appendix for budget spreadsheet

Administrative costs of $87,000 in the pre-year are directed to global teacher training, parent training, and set up costs associated with the Pilot Program. In Post Years 4 and 5, the yearly $15,000 will be directed to data collection and a written report to communicate results of the program.

1. **DYSLEXIA PILOT FUNDING OPPORTUNITIES, Task Force Presentation, September 2015** (updated to reflect ESSA reauthorization in 2015)
   a. **Federal Funding Streams**
      i. IDEA: Individuals with Disabilities Education Act (IDEA Authorized Funding Streams handout) includes State grant programs and several discretionary (competitive grant programs).
      - Part B Section 611: Section 611 is for students ages 3-21 and authorizes funding to students identified as needing special education services to access the general curriculum.
      - Up to 15 % of IDEA Part B funds for coordinated early intervening services (EIS) can be used to assist students in grades K-12 (emphasis on K-3) who are not currently identified as needing special education or related services but who need additional academic and behavioral support to succeed in general education. EIS funds can also be used to provide professional development to educators who are responsible for helping children who need additional academic and behavioral support to succeed in a general education environment or to provide direct interventions to children who need academic and behavioral support. EIS funds may be used in coordination with ESEA funds and must supplement not supplant ESEA funds. Often these funds are used to

implement Response to Intervention or a Multi-Tiered System of Supports to help students in general education with academic and behavioral support.

- Title I, Parts D: Section 651: Purpose to assist State educational agencies in reforming and improving their systems for personnel preparation and professional development in early intervention, educational and transition services in order to improve results for children with disabilities.
- Title I, Part D: Section 654: authorizes discretionary grants to SEAs and LEAs for a variety of special education activities including research, evaluation and the training and recruitment of personnel. Supports special education and regular education teachers of children w/ disabilities and principals, such as programs that:
    a. Provide teacher mentoring;
    b. Team teaching;
    c. Reduced class schedules; and
    d. Intensive Professional Development activities that:
        i. Improve the knowledge of special education and regular education teachers concerning the academic and developmental or functional needs of students w/ disabilities; effective instructional strategies, methods and skills and to improve teaching practices and student academic achievement;
        ii. Provide training in how to teach and address the needs of children with different learning styles and children who are limited English proficient;
        iii. Improve the knowledge of special education and regular education teachers and principals and in appropriate cases, paraprofessionals, concerning effective instructional practices;
        iv. Involve collaborative groups of teachers, administrators, and related service personnel;
        v. Provide training in methods scientifically based reading instruction, including early literacy instruction;
        vi. Using classroom based techniques to assist children prior to referral for special education;
        vii. Teacher mentoring from exemplary special education teachers, principals or superintendents; and
        viii. Interagency activities to ensure that early intervention personnel are adequately prepared and trained.

- Part D: Title I, Section 662: Personnel Development to Improve Services and Results for Children with Disabilities
    a. Ensure personnel have the necessary skills and knowledge, derived from practices that have been determined, through scientifically based research, to be successful in serving those children.
    b. Ensure that regular education teachers have the necessary skills and knowledge to provide instruction to students with disabilities in the regular education classroom.
    c. Implement effective teaching strategies, classroom based techniques and interventions to ensure appropriate identification of students who may be eligible for special education services and to prevent the misidentification, inappropriate overidentification or underidentification of children as having a disability, especially minority and limited English proficient children.
    d. Provide continuous personnel prep, training and PD designed to provide support and ensure retention of special education and general education teachers.
    e. Provide activities to promote instructional leadership and improved collaboration between general educators, special education teacher and related service personnel.
    f. Create and support teacher faculty partnerships (such as professional development schools) SEE also ESSA/ESEA, professional development academies.
    g. Provide in-service professional development to beginning and veteran special education teachers through ongoing exchange of information.
- Title I, Part D, Section 663: Demonstration Projects and Implementation of Scientifically Based Research
    a. Competitive Grants to support model demonstration projects that promote academic achievement and improve results for children with disabilities.
    b. Provide training for both regular education teachers and special education teachers to address the needs of students with different learning styles.
    c. Facilitate systemic changes.
    d. Testing research finding in typical settings where children with disabilities receive services to determine the usefulness, effectiveness and general applicability of such research finding.
    e. Enabling parents, professionals and other persons to learn about and implement the findings of scientifically based research and successful practices developed in model demonstration projects, relating to the provision of services to children with disabilities.
    f. Continuous preparation and training to all personnel mentioned above.

b. ESSA: Every Student Succeeds Act, 2015 Reauthorization

i. Title I: Improving the Academic Achievement of the Disadvantaged
- Includes prevention and intervention grants for disadvantaged students and LEA school improvement grants to help targeted populations.

ii. Title II: Preparing, Training and Recruiting High Quality Teachers and Principals and Other School Leaders:
- Part A: Effective Instruction, Teacher Quality State Grants: See US ED Guidance Document
- Part B: National efforts: Teacher/Leader Incentive Programs, Literacy Education for All, Results for the Nation (LEARN) which includes Innovative Approaches to Literacy, Effective Educator Development, School Leader Recruitment and Support, and others.

Potential Private and Public Funding & GRANT Opportunities

Grantee	Award Info.	Notices and Deadlines	Requirements	Contact & Resources
FEDERAL FUNDS **Grants.gov** **Grants 101** **Grants.gov Blog**				
ESSA/ESEA: Title II, Part A Funds See Non-Regulatory Guidance for Title II, Part A: Building Systems of Support for Excellent Teaching and Leading, USDOE, 9.26.2016	--5% to SEAs: up to 1% for administration and 4% for distribution --Not < 95% for LEA Subgrants. ● Up to 3% for school prep academies ESEA 2101(c)(3) ● Remainder for other subgrants		To ensure equity of educational opportunity these funds are used to support the following: 1. Traditional and nontraditional pathways to develop academies, residences and alternative routes to teaching 2. To support recruitment, selection, hiring of promising educators 3. To increase student achievement, improve quality and effectiveness of teachers, principals and other school leaders, increase # of teachers and principals who are effective at improving academic achievement and provide students from low income families and minority students greater access to effective teachers and principals. 4. SEAs and LEAs must engage in meaningful consultation w/ a range of stakeholders from diverse backgrounds -- families, students, educators, private schools, community partners: ESSA: 2101(d)(3) and 2102(b)(3) 5. SEAs and LEAs must seek advice on how to improve; coordinate w/ other related programs and ensure equitable participation 6. Strategies to gain input: a. Be flexible w/ participation scheduling b. Seek diverse perspectives c. Make stakeholders aware of past and current uses of Title II, Part A funds and	

			research or analysis of proposed new use of funds d. Consider stakeholder concerns	

HR 3033, The READ Act National Science Foundation Research in Disabilities Education (RDE) Program	Not less than $2.5M for dyslexia grants annually Up to $2.5M for learning disabilities	Noticed April 2016 Closed September 6, 2016 NSF Dyslexia-Specific Grant Notification Dear Colleague, April 2016	• Research on the science of dyslexia • Criteria for Grant Awards: science of specific learning disability, including dyslexia, such as research on the early identification of children and students with dyslexia, professional development for teachers and administrators of students with dyslexia, curricula and educational tools needed for children with dyslexia, and implementation and scaling of successful models of dyslexia intervention. The READ Act specifies improving early identification, teaching tools and curricula development, preparation and training for teachers and school administrators, and the scalability of particular interventions. The READ Act does not limit NSF funding to these types of inquiries, but Congressman Smith's intent is for READ Act-supported research to yield practical interventions that are scalable and can produce measurable (positive) results.	Mark Leddy, EHR/HRD, Program Director, mleddy@nsf.gov Rob Ochsendorf, EHR/DRL, Program Director, rochsend@nsf.gov Finbarr Sloane, EHR/DRL, Program Director, fsloane@nsf.gov

			Rep. Lamar Smith's office provided the following information about the READ Act grants process and intent: ● NSF has a few fundamental requirements for considering an education application for funding. First, NSF's support for education research must be connected to STEM education. STEM is what differentiates NSF-funded education research from Department of Education-funded research and what differentiates NSF-funded learning disabilities research from NIH-funded research. ● The STEM connection cannot be waived, but it is not a strait jacket. Here is a very rudimentary example of what NSF could consider: ○ Dyslexic students often manifest superior higher mathematical aptitudes. Within schools, how can we identify dyslexic students effectively and efficiently, and then how can we identify and encourage dyslexic students who show special math aptitude? ● A proposed pilot program would: ○ Demonstrate/test the effectiveness of a particular approach to identification of dyslexic students. ○ Train teachers and administrators and develop teaching tools to identify individual students' aptitudes. o Demonstrate/test the effectiveness of particular intercessions designed to encourage and develop math abilities.	

			• Second, NSF endeavors not to support redundant or derivative research. This is sometimes easier said than done, but NSF, NIH and DoE do look over each other's shoulders.	
Comprehensive Literacy Centers, part of ESSA amendment sponsored by Senator Cassidy, R- LA	$4.4 M grants from OSEP/USEd to 3 agencies: University of Oregon $1.5M AIR: American Institute for Research: $2.1M Three grants for the development of model demonstration projects aimed at improving literacy outcomes for English learners with disabilities in grades 3-5.		1. A national center to focus on improving literacy skills of students at risk of not attaining full literacy skills due to a disability, including dyslexia, U of O. Center will assist states, LEAs, schools and teachers to identify students using evidence based interventions and assessments to improve students' literacy skills. Will work w/ parent groups like PPMD. Unclear how $$ (if any would be distributed) 2. A national center on intensive intervention will assist state and local educational agencies in their efforts to support schools and educators to implement intensive intervention to improve academic and behavioral outcomes for students with disabilities who have persistent learning and behavior difficulties. The center will provide technical assistance and disseminate resources to state and local educational agencies and schools to refine and coordinate their system of instruction and intervention for students who need intensive intervention to succeed in school and be prepared for postsecondary opportunities.	Federal Register Program Notice
Department of Education Discretionary Grant			For DOE Grants, click through to each agency for the particulars which are too numerous to list here.	Each agency has a specific contact EdPubs, Technical Assistance for Grants

Programs for Fiscal Year (FY) 2016 Office of Elementary and Secondary Education OESE Office of Innovation and Improvement Office of Postsecondary Education Office of Special Education and Rehabilitative Services (OSEP) • lNIDRR • SEP • RSA Office of Career, Technical and Adult Education (CTAE) Office of English Language Acquisition	http://www2.ed.gov/fund/grant/find/edlite-forecast.html#chart4			

Institute of Education Sciences (IES) Researcher-Practitioner Partnerships in Education Research CFDA 84.305H		Spring 2017		Program Officer: Dr. Allen Ruby National Center for Education Research Telephone: (202) 245-8145 Email: Allen.Ruby@ed.gov Dr. Jacquelyn Buckley National Center for Special Education Research Telephone: (202) 245-6607 Email: Jacquelyn.Buckley@ed.gov
MARYLAND GOVERNMENT GRANT OPPORTUNITIES **MD Grants Office Annual Report by Department** **MD Grants 2015**				
Grantee	**Award Info.**	**Notices/ Deadlines**	**Requirements**	**Contact & Resources**
MSDE: Office of the State Superintendent, Grants Examples: Ready for Kindergarten: Professional Development Grants	Used to train PK and K teachers	Deadline: Receipt by 4:00 p.m. on Friday, July 1, 2016	Awarded annually, 24 awards.	Michelle Szczepaniak, Grants Specialist Office of the State Superintendent Grants Administration & Resource Development Office Ready for Kindergarten (R4K) Early Childhood Comprehensive Assessment System Professional Development Grant at the Maryland State Department of Education, Division of Instruction, 200 W. Baltimore St., Baltimore, MD 21201

MSDE Competitive Grants and formula grants			The Pilot program implementation advisory group would work with the Principle Investigator to identify funding streams through ESSA/ESEA and IDEA, as well as investigate formula grant money that would be appropriate funding streams for a reading/literacy pilot serving students from EL, low socioeconomic and at risk populations.	ATTN: Robert Wagner Phone: 410-767-7811 Fax: 410-333-6226 Email: robert.wagner1@maryland.gov
PRIVATE GRANTS, NATIONAL ORGANIZATIONS **Foundation Grants Directory, Enoch Pratt, in person only**				
Grantee	**Award Info.**	**Notices and Deadlines**	**Requirements**	**Contact & Resources**
Dollar General Literacy Grants	Provide millions all over the country	Available in January 2017	• 2 schools in Thurmont MD have grants from DG • Owner dropped out of high school, didn't learn to read b/c had to work...started a successful business.	

RGK Foundation	$15-$100,000	Ongoing Submit Letter of Inquiry online	The Foundation's primary interests within Education include programs that focus on formal K-12 education (particularly mathematics, science and reading), teacher development, literacy, and higher education.	erussell@rgkfoundation.org
OAK Foundation	$25K+		Funded Learning Ally and other dyslexia specific grants. Principles and Process	
New Schools Venture Fund Teacher Training	Eligible entities: -district or charter management organization interested in school redesign, or -third-party organization, with an innovative school model, supporting districts and charter networks to implement the model (aka model provider)	August - January: Applications Accepted Awards: May Multi-year grants The application for NewSchools Invent is now open. If you and your team plan to launch a new school in 2017 or 2018, and believe that you meet our Invent eligibility and investment criteria, please find our application here.	• We raise philanthropy from donors and use it to find, fund and support education entrepreneurs who are transforming public education so that all children – especially those in underserved communities – have the opportunity to succeed. • Funded Urban Teachers • Cultivating pipelines of diverse senior leaders in education • Funded Organizations: KIPP, public schools, private schools, public charters, private charters: http://newschools.org/our- ventures/innovative-schools/#yes-prep-public- schools	http://newschools.org/about- us/team/

MARYLAND PRIVATE GRANTS[56] Grant Research Tool Foundation Directory Online Association of Baltimore Area Grantmakers				
Grantee	**Award Info.**	**Notices and Deadlines**	**Requirements**	**Contact & Resources**
The Morton K. and Jane Blaustein Foundation Grant Baltimore City	$5K+ Each year, the Blaustein, Hirschhorn and Rosenberg foundations award over 450 grants totaling $13 million across a variety of program areas.	See requirements for each foundation.	Funded more than $130K for Urban Teacher Center (Jennifer Greene, CEO) Grantees must be nonprofit organizations with tax exempt status under section 501(c)(3) of the Internal Revenue Code, and organized and operated for charitable purposes. Organizations with fiscal sponsors are also eligible to apply.	Applying for a Grant Read about their priorities and guidelines in The Foundations and Frequently Asked Questions -- see below for the other grantors. Jeanne P. Blaustein: President Betsy F. Ringel: Executive Director Tanya C. Herbick: Senior Program Officer Michael J. Arnst: Program Associate Email: info@blaufund.org

[56] Grantmakers for Baltimore and Maryland are too numerous to list. Some of the larger grant foundations are included -- for a complete list, please click the links at the top of this page.

Jacob and Hilda Blaustein Foundation	Inspired by Jewish values of *tzedakah* (the obligation to give to the community), social justice and human rights, this foundation makes grants that strengthen Jewish life, Israeli democracy, educational opportunity, health and mental health, and human rights.	Educational Opportunity Grants		Michael J. Hirschhorn: President Betsy F. Ringel: Executive Director Lara A. Hall: Senior Program Officer; Educational Opportunity, Health and Mental Health Brenda Bodenheimer Zlatin: Senior Program Officer; Jewish Life, Israel, Human Rights Email: info@blaufund.org
Henry and Ruth Blaustein Rosenberg Foundation	Seeking to improve the quality of life in Baltimore through educational opportunity, improved health care, and access to cultural programs, this foundation makes grants that strengthen arts and culture, youth development, health, and adult education.	Educational Opportunity Grants		Henry A. Rosenberg, Jr.: President Betsy F. Ringel: Executive Director Lara A. Hall: Senior Program Officer Michael J. Arnst: Program Associate Email: info@blaufund.org

David and Barbara B. Hirschhorn Foundation Foundation Family Tree	Seeking to improve the lives of families and children and cultivate a "level playing field", this foundation supports Jewish and secular initiatives that expand educational opportunity, address human service needs, and promote intergroup tolerance and understanding.	Education and Literacy Grants Grantees		
Harry and Jeannette Weinberg Foundation	Baltimore City Baltimore County	Rolling	Education Workforce Development Disabilities Program Grant Information Program Grant Proposal	Grants Intake Manager The Harry and Jeanette Weinberg Foundation 7 Park Center Court Owings Mills, MD 21117 grantsintake@hjweinberg.org

The Abell Foundation, Inc. Please refer to Grantmaking Process, Guidelines and Procedures for more information.	The Foundation funds nonprofit organizations located and active in Maryland. Our focus is on Baltimore City, with more than 95 percent of our grants being awarded to organizations in the Baltimore metropolitan area. Average grant size is approximately $70,000.	The schedule proposal deadlines for 2017 is as follows: January 5 March 1 May 1 August 1 October 1	Education and Workforce Development Grants Case Studies The Foundation has seven broad program areas of interest: education, workforce development, health and human services, community development, criminal justice and addiction, environment, and arts. Within these areas, the Foundation invites requests for demonstration projects, feasibility studies, capital improvements, new construction and equipment, program development and enhancements, research, and program-related investments.	Please submit your letter of inquiry by email to abell@abell.org or mail a hard copy to: Robert C. Embry, Jr., President Abell Foundation 111 South Calvert Street, Suite 2300 Baltimore, MD 21202

Annie E. Casey Foundation	Maryland Grants Supports the Campaign for Grade Level Reading, Maryland	Invitation only -- no unsolicited grants	The Annie E. Casey Foundation is limited to initiatives in the United States that have significant potential to demonstrate innovative policy, service delivery and community supports for disadvantaged children and families. The Foundation's approach to grant making focuses on commitments that enable us to invest in long- term strategies and partnerships that strengthen families and communities. The Foundation invites grantees to participate in these projects. We do not seek, accept or fund unsolicited grant applications.	Grant Making Contact Form: http://www.aecf.org/contact/ The Campaign for Grade-Level Reading 443.986.1275 rfairchild@gradelevelreading.net @readingby3rdhttp://www.twitter.com/readingby3rd
Lockhart Vaughan Foundation, Inc.	Assets: $34,342,534 (market value) Expenditures: $1,920,904 Total giving: $1,743,050 Qualifying distributions: $1,789,535		The foundation directs its giving toward its 4 goals for the city of Baltimore, MD: 1) quality public education; 2) more educational choices; 3) better environment; and 4) vibrant neighborhoods. Giving is for specific strategies.	Lockhart Vaughan Foundation, Inc. 2 E. Read St., Ste. 100 Baltimore, MD United States 21202-2470 Telephone: (410) 837-9400 Source: Foundation Directory Online

SENATE BILL 823

F1 (6lr3593)

ENROLLED BILL

— Education, Health, and Environmental Affairs / Ways and Means —

Introduced by Senator Conway

Read and Examined by Proofreaders:

_____
Proofreader.

_____
Proofreader.

Sealed with the Great Seal and presented to the Governor, for his approval this _____ day of _____ at _____ o'clock, _____M.

_____
President.

CHAPTER _____

AN ACT concerning

Task Force to Study the Implementation of a Dyslexia Education Program
~~Extension~~ – *Membership, Duties, and Extension*

FOR the purpose of altering the ~~**date by which**~~ *membership and duties of* the Task Force to Study the Implementation of a Dyslexia Education Program; *altering the date by which the Task Force* is required to submit certain findings and recommendations; extending the termination date of the Task Force; and generally relating to the Task Force to Study the Implementation of a Dyslexia Education Program.

BY repealing and reenacting, with amendments,
Chapter 411 of the Acts of the General Assembly of 2015
Section ~~1(g)~~ *1(b), (f), and (g)* and 2

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets] indicate matter deleted from existing law.
Underlining indicates amendments to bill.
~~Strike out~~ indicates matter stricken from the bill by amendment or deleted from the law by amendment.
Italics indicate opposite chamber / conference committee amendments.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2015. It shall remain effective for a period of **[**1 year**]** **2 YEARS** and 1 month and, at the end of June 30, **[**2016**]** **2017**, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2016.

Approved:

_____

Governor.

_____

President of the Senate.

_____

Speaker of the House of Delegates.

Chapter 411

(House Bill 278)

AN ACT concerning

Task Force to Study the Implementation of a Dyslexia Education Program

FOR the purpose of establishing the Task Force to Study the Implementation of a Dyslexia Education Program; providing for the composition, chair, and staffing of the Task Force; prohibiting a member of the Task Force from receiving certain compensation, but authorizing the reimbursement of certain expenses; requiring the Task Force to study and make recommendations regarding certain matters; requiring the Task Force to report its findings and recommendations to the Governor and certain committees of the General Assembly on or before a certain date; providing for the termination of this Act; and generally relating to the Task Force to Study the Implementation of a Dyslexia Education Program.

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That:

(a) There is a Task Force to Study the Implementation of a Dyslexia Education Program.

(b) The Task Force consists of the following ~~11~~ members:

(1) one member of the Senate of Maryland, appointed by the President of the Senate;

(2) one member of the House of Delegates, appointed by the Speaker of the House;

(3) the State Superintendent of Schools, or the Superintendent's designee;

(4) one representative of the Maryland Association of Boards of Education, appointed by the Executive Director of the Association;

(5) one representative of the Public School Superintendents Association of Maryland, appointed by the Executive Director of the Association; ~~and~~

(6) one representative of the Maryland State Education Association, appointed by the Executive Director of the Association;

(7) one representative of the Maryland School Psychologists' Association, appointed by the President of the Association; and

~~(6)~~ *(8)* the following ~~six~~ members, appointed by the Governor:

(i) one representative of an employee organization of public school teachers;

(ii) one representative of a local school system;

(iii) two representatives of the dyslexia education community;

(iv) one representative of an organization that certifies dyslexia identification methodologies; ~~and~~

(v) one consumer member who has experience with dyslexia identification, education, and treatment; *and*

(vi) one representative of Decoding Dyslexia Maryland.

(c) The Governor shall designate the chair of the Task Force.

(d) The State Department of Education shall provide staff for the Task Force.

(e) A member of the Task Force:

(1) may not receive compensation as a member of the Task Force; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(f) The Task Force shall:

(1) determine current practices for identifying and treating dyslexia in students in Maryland public schools;

(2) determine current practices for identifying and treating dyslexia in other states;

(3) determine the appropriate structure for establishing a dyslexia education program and make recommendations on:

(i) the feasibility of funding a dyslexia education program through the State Department of Education or alternative funding mechanisms and sources or both;

(ii) the methodologies that should be used to test students and identify dyslexia and pre–dyslexia tendencies in students;

(iii) the appropriate age to begin testing for dyslexia and pre–dyslexia tendencies; and

(iv) the best practices for treating and educating students identified as having dyslexia or pre–dyslexia tendencies; and

(4) develop a pilot program to initiate the implementation of the recommendations of the Task Force in an appropriately limited geographical area.

(g) On or before December 30, 2015, the Task Force shall report its findings and recommendations to the Governor and, in accordance with § 2–1246 of the State Government Article, the Senate Education, Health, and Environmental Affairs Committee and the House Ways and Means Committee.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2015. It shall remain effective for a period of 1 year and 1 month and, at the end of June 30, 2016, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.

Approved by the Governor, May 12, 2015.

Cost Estimates Per School for Dyslexia Pilot Program

Staff	Number	FTE percentage	Yearly Salary/teacher	% benefits	Total Cost	Pre-year	Implementation Year 1 Kindergarten	Implementation Year 2 Kindergarten, Gr. 1	Implementation Year 3 Kindergarten, Gr 1&2	Totals through Year 4	Post-Year 4	Post-Year 5	Total
Classroom Teachers K (part of fixed school costs)	5	1	70,000	0.1	77,000	0	385,000	385,000	385,000				
Classroom Teachers 1 (part of fixed school costs)	5	1						385,000	385,000				
Classroom Teachers 2 (part of fixed school costs)	5	1							385,000				
Special Education Teacher* (fixed costs)	1	0.5	35,000	0.1	38,500	0	38,500	38,500	38,500				
Speech-Language Path.* (fixed costs)	1	0.5	35,000	0.1	38,500	0	38,500	38,500	38,500				
ESOL teacher	1	0.25	17,500	0.1	19,250	0	19,250	19,250	19,250				
Paraeducator	up to 6		25,000	0.1	27,500	0	82,500	165,000	165,000				
Coach/Mentor* (master teacher)	1	0.5	45,000	0.1	49,500	24,750	49,500	49,500	49,500				
Principal Investigator	1	1	60,000	0.1	60,000	30,000	60,000	60,000	60,000		15,000	15,000	
Pilot Team (could be trainers, doctoral students)	TBD		60,000	0.1	66,000	21,870	66,000	66,000	66,000				
Teacher Trainer/coach	1	0.5	45,000	0.1	24,500	11,250	24,570	45,000	45,000				
Total						87,870	763,820	1,251,750	1,636,750	3,740,190			
Fixed School District Costs without Pilot staffing							-462,000	-847,000	-1,232,000	-2,541,000			
Total additional staffing costs assuming these staff are not part of the building staffing schedule)						87,870	301,820	404,750	404,750	1,199,190			
Practicum Costs**	Per year		Per hour		15 hours								
Teacher hourly wage- master teacher	2		50	0.1	1,650								
Teacher hourly wage - participating teacher	up to 6		30	0.1	2,970								
Paraeducator hourly wage	up to 3		18	0.1	2,673								
Coach hourly wage 30 hours			50	0.1	1,500								
Materials	$150/tchr				1,815								
Total cost per year					10,608		10,608	10,608	10,608	31,824			
Training - 45 hours													
Teacher stipends - master teacher	2		50	0.1	4,950		4,950	4,950	4,950	14,850			
Teacher stipends - participating teacher	up to 6		30	0.1	8,910		8,910	8,910	8,910	26,730			
Paraeducator stipends	up to 3		18	0.1	2,673		2,673	2,673	2,673	8,019			
Trainer (500 pp)					5,500		5,500	5,500	5,500	16,500			
Student materials (11 students/$200.00)					2,200		2,200	2,200	2,200	6,600			
					24,233		24,233	24,233	24,233	72,699			
Monthly (9) after school training - 2 hours each (18 total)					18 hours								
Teacher stipends - master teacher	up to 5		50	0.1			2,970	3,960	4,950	11,880			
Teacher stipends - participating teacher	up to 6		30	0.1			3,564	3,564	3,564	10,692			
Paraeducator stipends	up to 6		18	0.1			1,069	1,069	1,069	3,208			
Trainer (500 pp)	1						6,000	6,000	6,000	18,000			
Total Monthly Meetings							13,603	14,593	15,583	43,780			
TOTALS						87,870	350,264	454,184	455,174	1,347,493	15,000	15,000	1,377,493

* These are trained as "train-the-trainer" to sustain training and coaching after the Pilot is completed

** 15 hours of supervised practicum

$6600 in materials total, divided among 3 years

ESOL teacher is consultative unless there is a sizeable number of ELs, in which case, increase that staffing to .5

$70,000 is used as average teacher salary

References

Adams, G. & Brown, S. (2004). *The six-minute solution: A reading fluency program*. Longmont, CO: Sopris West Educational Services.

Adams, W., & Reynolds, C. R. (2009). *Essentials of WRAML2 and TOMAL-2 assessments*. Hoboken, NJ: John Wiley & Sons.

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology, 100,* 235-251.

Alamprese, J. A., MacArthur, C. A., Price, C. & Knight, D. (2011). Effects of a structured decoding curriculum on adult literacy learners' reading development. *Journal of Research on Educational Effectiveness. 4*(2), 154-172. doi:10.1080/19345747.2011.555294

Alexander-Passe, N. (2006). How dyslexic teenagers cope: An investigation of self-esteem, coping and depression. Dyslexia, 12(4), 256-275.

Alexander-Passé, N. (2008). The sources and manifestations of stress amongst school-aged dyslexics compared with the same age sibling controls. *Dyslexia: An International Journal of Research and Practice, 14*(4), 291-313.

Alexander-Passe, N. (2015). The dyslexia experience: Difference, disclosure, labelling, discrimination and stigma. *Asia Pacific Journal of Developmental Differences, 2*(2), 202-233.

Alexander-Passe, N. (2016). Dyslexia: Investigating self-harm and suicidal thoughts/attempts as a coping strategy. *Journal of Psychology & Psychotherapy, 5,* 224.

Anthony, J., & Francis, D. (2005). Development of phonological awareness. *Current Directions in Psychological Science, 14*(5), 255-259.

Arnold, E. M., Goldston, D. B., Walsh, A. K., Reboussin B. A., Daniel, S. S., Hickman, E., & Wood, F. B. (2005). Severity of emotional and behavioral problems among poor and typical readers. *Journal of Abnormal Child Psychology, 33*(2), 205-217.

Averill, O.H. & Rinaldi, C. (2011). The RTI and PBIS approaches involve targeting specific areas in which students are struggling. *District Administration.* Retrieved on September 30, 2016 from https://www.districtadministration.com/article/multi-tier-system-supports

Berninger, V. W., & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science.* Baltimore, MD: Paul H. Brookes Publishing.

Birsh, J. R. (2011). Connecting research and practice. In J. R. Birsh (Ed.), *Multisensory teaching of basic language skills* (3rd ed., pp.1–24). Baltimore, MD: Paul H. Brookes Publishing.

Blachman, B. (1984). Relationship of rapid naming ability and language analysis skills to kindergarten and first-grade reading achievement. *Journal of Educational Psychology, 76(4),* 610-622.

Blanchett, W. J. (2010). Telling it like it is: The role of race, class, & culture in the perpetuation of learning disability as a privileged category for the white middle class. *Disability Studies Quarterly*, *30*(2), 6.

Bos, C., Mather, N., Dickson, S., Podhajski, B., & Chard, D. (2001). Perceptions and knowledge of preservice and inservice educators about early reading instruction. *Annals of Dyslexia*, *51*(1), 97-120.

Bouffard, S. (2003). Doing what works: Scientifically based research in education/ Evaluating out-of-school time / Issue Archive / The Evaluation Exchange/ Evaluation / HFRP - Harvard Family Research Project.

Brock, M. E., & Carter, E. W. (2016). A meta-analysis of educator training to improve I implementation of interventions for students with disabilities. *Remedial and Special Education.* doi:10.1177/0741932516653477

Brown, M. C., Sibley, D. E., Washington, J. A., Rogers, T. T., Edwards, J. R., MacDonald, M. C., Seidenberg, M. S. (2015). Impact of dialect knowledge on a basic component of learning to read. *Frontiers in Psychology*, *6,* 1-17.

Bruce, J., & Showers, B. (2002). Student achievement: Through staff development. *Designing training and peer coaching: Our needs for learning.* Alexandria, VA: ASCD.

Carney, K. J., & Stiefel, G. S. (2008). Long-term results of a problem-solving approach to response to intervention: Discussion and implications. *Learning Disabilities: A Contemporary Journal*, *6*(2), 61-75.

Carrow-Woolfolk, E. (1996). Oral and written language scales (OWLS) [Assessment instrument]. Circle Pines, MN: AGS.

Catts, H. (1989). Defining dyslexia as a developmental language disorder. *Annals of Dyslexia, 39*, 50-64.

Catts, H. (1991). Early identification of dyslexia: Evidence from a follow-up study of speech-language impaired children. *Annals of Dyslexia, 41*, 163-177.

Catts, H. (1993). The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research, 36*, 948-958.

Catts, H. & Hogan, T. (2003). Language basis of reading disabilities and implications for early identification and remediation. *Reading Psychology, 24*, 223-246.

Catts, H., & Kamhi, A. (2005). *The connections between language and reading disabilities*. Mahwah, NJ: Erlbaum.

Catts, H. W., Nielsen, D. C., Bridges, M. S., Bontempo, D. E., & Liu, Y. S. (2013). Early identification of reading disabilities within an RTI framework. *Journal of Learning Disabilities, 48*(3), 281-297.

Cavendish, W. (2013). Identification of learning disabilities: Implications of proposed *DSM-5* criteria for school-based assessment. *Journal of Learning Disabilities, 46*, 52-57.

Chateau, D., & Jared, D. (2000). Exposure to print and word recognition processes. *Memory & Cognition, 28*, 143-153. doi:10.3758/BF03211582

Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Educational Policy, 19*(3), 476-509.

Coley, R. J. (2002). *An uneven start: Indicators of inequality in school readiness*. Princeton, NJ: Educational Testing Service.

Connor, C. M., Piasta, S. B., Fishman, B., Glasney, S., Schatschneider, C., Crowe, E., . . . Morrison, F. J. (2009). Individualizing student instruction precisely: Effects of child by instruction interactions on first graders' literacy development. *Child Development, 80*(1), 77-100.

Cortiella, C., & Horowitz, S. H. (2014). The *state of learning disabilities: Facts, trends and emerging issues.* New York, NY: National Center for Learning Disabilities.

Craig, H. K. (2008). Effective language instruction for African American children. In S. B. Neuman (Ed.), *Educating the other America: Top experts tackle poverty, literacy, and achievement in our schools* (pp. 163–185). Baltimore, MD: Brookes.

Craig, H. K., & Washington, J. A. (2006). *Malik goes to school: Examining the language skills of African American students from preschool-5th grade.* Mahwah, NJ: Erlbaum.

Crews, K. J., & D'Amato, R. C. (2009). Subtyping children's reading disabilities using a comprehensive neuropsychological measure. *International Journal of Neuroscience, 119,* 1615-1639.

Cunningham, A., & Stanovich, K. (1991). Tracking the unique effects of print exposure in children: Associations with vocabulary, general knowledge, and spelling. *Journal of Educational Psychology, 83,* 264-274.

Cunningham, A., & Stanovich, K. (1993). Children's literacy environments and early word recognition subskills. *Reading and Writing, 5*(2), 193-204.

Cunningham, A. E., Zibulsky, J., Stanovich, K. E., & Stanovich, P. J. (2009). How teachers would spend their time teaching language arts: The mismatch between self-reported and best practices. *Journal of Learning Disabilities, 42*(5), 418-430.

Cunningham, P. (1990). The names test: A quick assessment of decoding ability. *Reading Teacher, 44*(2), 124-129.

Cutting, L. E., Materek, A., Cole, C. A. S., Levine, T. M., & Mahone, E. M. (2009). Effects of fluency, oral language, and executive function on reading comprehension performance. *Annals of Dyslexia, 59,* 34-54.

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership, 53*(6), 4–10.

Davis, N., Fan, Q., Compton, D. L., Fuchs, D., Fuchs, L. S., Cutting, L. E., . . . Anderson, A. W. (2010). Influences of neural pathway integrity on children's response to reading instruction. *Frontiers in systems neuroscience, 4,* 150.

Day, K., & Day, H. (1984). Kindergarten knowledge of print conventions and later school achievement: A five-year follow-up. *Psychology in the Schools, 21,* 393-396. doi:10.1002/1520-6807(198407)

De Oliveira, D. G., da Silva, P. B., Dias, N. M., Seabra, A. G., & Macedo, E. C. (2014). Reading component skills in dyslexia: Word recognition, comprehension and processing speed. *Frontiers in Psychology, 5*, 1339.

Dunn, L. M. (2007). Peabody picture vocabulary test-revised (PPVT-R): Forms L and M [Assessment instrument]. Circle Pines, MN: Pearson Clinical.

Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. *Review of Educational Research, 71*(3), 393-447.

Ehri, L., & Roberts, T. (2006). The roots of learning to read and write: Acquisition of letters and phonemic awareness. In D. Dickinson & S. Neuman (Eds.), *Handbook of early literacy research, Vol. 2* (pp. 113-131). New York, NY: Guilford Press.

Eissa, M. (2010). Behavioral and emotional problems associated with dyslexia in adolescence. *Current Psychiatry, 17*(1), 39-47.

Elbro, C., Rasmussen, I., & Spelling, B. (1996). Teaching reading to disabled readers with language disorders: A controlled evaluation of synthetic speech feedback. *Scandinavian Journal of Psychology, 37*(2), 140-155.

Everyone Reading: Success for students with dyslexia & LD. (n.d.). Retrieved on October 1, 2016, from http://everyonereading.org/about/about-multisensory-structured-language-education/

Farrell, L., & Hunter, M. (2008). Diagnostic decoding surveys: Beginning decoding survey & advanced decoding survey [Assessment instrument]. Cabin John, MD: Really Great Reading.

Farrell, L., & Hunter, M. (2010). Pre-reading probe [Assessment instrument]. Alexandria, VA: Readsters, LLC.

Farrell, L., Hunter, C. M., & Osenga, C. J. (2013). A new model for teaching high frequency words. *Readsters Reader, 3*(1). Retrieved on June 21, 2016 from http://www.readsters.com/resources/newsletter

Feifer, S. G. (2011). How SLD manifests in reading. In D. P. Flanagan & V .C. Alfonso (Eds.), *Essentials of specific learning disability identification* (pp. 21-42). Hoboken, NJ: Wiley.

Fletcher, J. M., & Lyon, G. R. (1998). Reading: A research-based approach. In W. Evers (Ed.), *What's gone wrong in America's classrooms* (pp. 49-90). Stanford, CA: Hoover Institute Press.

Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading: Good first teaching for all children.* Portsmouth, NH: Heinemann.

Frijters, J. C., Lovett, M. W., Steinbach, K. A., Wolf, M., Sevcik, R. A., & Morris, R. D. (2011). Neurocognitive predictors of reading outcomes for children with reading disabilities. *Journal of Learning Disabilities, 44,* 150-166.

Gathercole, S.. & Alloway, T. P. (2008). *Working memory and learning: A practical guide for teaching.* Thousand Oaks, California: Sage Publications Ltd.

Geva, E., Yaghoub-Zadeh, Z., & Schuster, B. (2000). Understanding individual differences in word recognition skills of ESL children. *Annals of Dyslexia, 50*(1), 121-154.

Gillis, M.B. and McCombes-Tolis, J. (2016). You can't make an omelet without breaking a few eggs: The trials, tribulations and triumphs of retraining tenured teachers in scientific research-based approaches to teaching reading. Perspectives on Language and Literacy, 42(4).33-41

Gillon, G. T. (2004). *Phonological awareness: From research to practice*. New York, NY: Guilford Press.

Gouaux, J. (2016). Understanding dyslexia: Five ways to end the homework struggle. *The Science of Learning Blog.* Retrieved from http://www.scilearn.com/blog/understanding-dyslexia-homework-struggles

Graham, P. (2007). Improving teacher effectiveness through structured collaboration: A case study of a professional learning community. *Online Research in Middle Level Education, 31*(1), 1-17.

Hammill, D. D., & Larsen, S. C. (2009). Test of written language: Fourth edition (TOWL-4) [Assessment instrument]. Austin, TX: PRO-ED.

Handler, S. M. & Fierson, W. M. (2011). Joint technical report from the American Academy of Pediatrics: Learning disabilities, dyslexia, and vision. *Pediatrics, 127*(3), 554.

Hasbrouck, J. & Tindal, G. (2005). Oral reading fluency: 90 years of measurement. Technical report #33. *Behavioral Research and Teaching.* Eugene, OR: University of Oregon. Retrieved from http://eric.ed.gov/?id=ED531458

Hasbrouck, J., & Tindal, G. A. (2006). Oral reading fluency norms: A valuable assessment tool for reading teachers. *The Reading Teacher*, *59*(7), 636-644.

Hatcher, P. J., Hulme, C., & Snowling, M. J. (2004). Explicit phoneme training combined with phonic reading instruction helps young children at risk of reading failure. *Journal of Child Psychology and Psychiatry*, *45*(2), 338-358.

Heim, S., Tschierse, J., Amunts, K., Wilms, M., Vossel, S., Willmes, K., . . . Huler, W. (2008). Cognitive subtypes of dyslexia. *Acta Neurobiologiae Experimentalis, 68,* 73-72.

Helland, T. (2016). Dyslexia identified early and persists into adolescence. *Journal of Pediatrics, 170,* 341-344.

Henderson, Mapp, Johnson, and Davies. (2007). *Beyond the Bake Sale: The Essential Guide to Family-School Partnerships. Pp. 27-43.*

Henry, M. K. (2010). *Unlocking literacy: Effective decoding & spelling instruction (2nd ed.).* Baltimore, MD: Brookes Publishing.

Holloway, J. H. (2001). The benefits of mentoring. Educational Leadership 58(8), 85-86.

Hughes, C. A. & Dexter, D. D. (2011). Response to intervention: A research-based summary. Theory Into Practice, 50, 4-11. doi:10.1080/00405841.2011.534909.

Humphrey, N. (2002). Teacher and pupil ratings of self-esteem in developmental dyslexia. *British Journal of Special Education*, *29*(1), 29-36.

Hurford, D., Hurford, J., Head, K., Keiper, M., Nitcher, S., & Renner, L. (2016). The dyslexia dilemma: A history of ignorance, complacency and resistance in colleges of education. *Journal of Childhood & Developmental Disorders*, *2*(3), 4-5.

Invernizzi, M. [and others]. (2010). PALS-K, form B: assessment materials. [Richmond, Va.] : [Charlottesville, Va.] : Virginia State Dept. of Education ; University of Virginia, Curry School of Education.

Jackson, R. & Karger, J. (2015). *Audio-supported reading and students with learning disabilities.* Wakefield, MA: National Center on Accessible Educational Materials.

Johnson, E. S., & Pool, J. L. (2015). Screening for Reading Problems in Preschool and Kindergarten: An overview of select measures. *National Center on Learning Disabilities RTI Action Network.*

Joshi, R. M., Dahlgren, M., & Boulware-Gooden, R. (2002). Teaching reading in an inner city school through a multisensory teaching approach. *Annals of Dyslexia, 52*(1), 229-242.

Joshi, R. M., Binks, E., Hougen, M., Dahlgren, M. E., Ocker-Dean, E., & Smith, D. L. (2009). Why elementary teachers might be inadequately prepared to teach reading. *Journal of Learning Disabilities, 42,* 392-402.

Kamhi, A. G., & Catts, H. W. (2002). The language basis of reading: Implications for classification and treatment of children with reading disabilities. In K. Butler & E. Silliman (Eds.), *Speaking, reading, and writing in children with language learning disabilities: New paradigms in research and practice* (pp. 45-72). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Kamhi, A. & Catts, H. (Eds.). (2012). *Language and reading disabilities (3rd ed.).* Needham Heights., MA: Pearson.

Kaminski, R., & Cummings, K. (2008*). Linking assessment to instruction: Using dynamic indicators of basic early literacy skills in an outcomes-driven model.* Eugene, OR: Dynamic Measurement Group.

Kemp, S. L., & Korkman, M. (2010). *Essentials of NEPSY-II assessment*. Hoboken, N.J: John Wiley & Sons Inc.

Kempe, C., Gustafson, S., Samuelsson, S. (2011). A longitudinal study of early reading difficulties and subsequent problem behaviors. *Journal of Psychology, 52*(3), 242-250.

Kerins, M., Winkler, K., Sweeney, M., & Carran, D. (2006). The effects of systematic reading instruction on three classifications of readers. *Reading Research and Instruction, 45*(3), 243-260.

Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: John Wiley & Sons Inc.

Kilpatrick, D. (2016). *Appendix C of Equipped for reading success: A comprehensive, step-by-step program for developing phonemic awareness and fluency word recognition and PAST screener*. Syracuse, New York: Casey & Kirsch Publishers.

King, W. M., Giess, S. A., & Lombardino, L. J. (2007). Subtyping of children with developmental dyslexia via bootstrap aggregated clustering and the gap statistic: Comparison with the double-deficit hypothesis. *International Journal of Language and Communication Disorders, 42*, 77-95.

Korkman, M., Kirk, U., & Kemp, S. (1998). NEPSY: A developmental neuropsychological assessment. [Assessment instrument]. San Antonio, TX: The Psychological Corporation.

Kretlow, A. G., & Bartholomew, C. C. (2010, August 31). Using Coaching to Improve the Fidelity of Evidence-Based Practices: A Review of Studies. Retrieved on October 04, 2016, from http://tes.sagepub.com/content/33/4/279.short?rss=1

Lachmann, T., Berti, S., Kujala, T., & Schroger, E. (2005). Diagnostic subgroups of developmental dyslexia have different deficits in neural processing of tones and phonemes. *International Journal of Psychophysiology, 56*, 105-120.

Lemke, J. L. (1997). Cognition, context, and learning: A social semiotic perspective. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic, and psychological perspectives (pp. 37-56)*. Mahwah, NJ: Lawrence, Erlbaum Associates Inc.

Lerner, J. W. (1989). *Learning disabilities: Theories, diagnosis, and teaching strategies*. Boston, MA: Houghton Mifflin Harcourt.

Lewis K., Sandilos L. E., Hammer C. S., Sawyer B. E., Méndez L. I. (2016). Relations among the home language and literacy environment and children's language abilities: A study of Head Start dual language learners and their mothers. *Early Educational Development, 27*(4), 478-494.

Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2003). A definition of dyslexia. *Annals of Dyslexia, 53*(1), 1-14.

MacGinitie, W. H., MacGinitie, R. K., Cooter, R. B., Jr., & Curry, S. (1989). Gates-MacGinitie reading test: Third edition [Assessment instrument]. Rolling Meadows, IL: Riverside Publishing.

Magnusson, E., & Naucler, K. (1990). Reading and spelling in language-disordered children-linguistic and metalinguistic prerequisites: Report on a longitudinal study. *Clinical Linguistics and Phonetics, 4*(1), 49-61.

Malchow, H. (2014) International Dyslexia Association Letter on Structured Literacy . Retrieved on October 1, 2016 from https://dyslexiaida.org/structured-literacy/

Manis, F. R., Seidenberg, M. S., & Doi, L. M. (1999). See Dick RAN: Rapid naming and the longitudinal prediction of reading subskills in first and second graders. *Scientific Studies of Reading, 3*, 129-157.

Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons Inc.

Mather, N., & Jaffe, L. E. (2016). *Woodcock-Johnson IV: Reports, recommendations, and strategies*. Hoboken, NJ: John Wiley & Sons Inc.

Maughan B., Rowe R., Loeber R., Stouthamer-Loeber M. (2003). Reading problems and depressed mood. *Journal of Abnormal Child Psychology, 31*(2), 219-229.

McBride-Chang, C. (1999). The ABCs of the ABCs: The development of letter-name and letter-sound knowledge. *Merrill-Palmer Quarterly, 45*(2), 285-308.

McCandliss, B. D., & Noble, K. G. (2003). The development of reading impairment: A cognitive neuroscience model. *Mental Retardation and Developmental Disabilities Research Reviews, 9*, 196-205.

McCardle, P., Mele-McCarthy, J., Cutting, L., Leos, K., & D'Emilio, T. (2005). Learning disabilities in English language learners: Identifying the issues. *Learning Disabilities Research & Practice, 20*(1), 1-5.

McCardle, P. D., Chhabra, V., & Kapinus, B. A. (2008). *Reading research in action: A teacher's guide for student success*. Baltimore, MD: Paul H. Brookes Publishers.

McGrew, K., Schrank, F. A., & Mather, N. (2014). Woodcock-Johnson IV: Tests of cognitive abilities [Assessment instrument]. Rolling Meadows, IL: Riverside Publishing.

McGuinness, C., McGuinness, D., & McGuinness, G. Annals of Dyslexia (1996) 46: 73. PhonoGraphix, doi:10.1007/BF02648172

McMaster, K. L., & Wagner, D. (2007). Monitoring response to general education instruction. In S. R. Jimerson, M. K. Burns, & A. M. VanderHeyden (Eds.), *Handbook of response to intervention: The science and practice of assessment and intervention.* New York, NY: Springer.

Mermelstein, L. (2006). *Reading/writing connections in the K-2 classroom: Find the clarity and then blur the lines.* Boston, MA: Allyn & Bacon.

Metcalf, T. (n.d.). What's your plan? Accurate decision making within a multi-tier system of supports: Critical areas in tier 1. Michigan's integrated behavior and learning support initiative (MiBLSi).

Miles, T. R. (Ed.) (2004) *Dyslexia and Stress*. UK: Gateshead, Tyne and Wear.

Misra, M., Katzir T., Wolf, M., & Poldrack, R. A. (2004). Neural systems for rapid automatized naming (RAN) in skilled readers: Unraveling the RAN-reading relationship. *Scientific Studies of Reading, 8*, 241-256.

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do.* Washington, DC: American Federation of Teachers.

Moats, L. C. (2000). *Whole language lives on: The illusion of "balanced" reading instruction*. Washington, DC: Thomas B. Fordham Foundation.

Moats, L. (2009). Knowledge foundations for teaching reading and spelling. *Reading and Writing, 22*(4), 379-399.

Moats, L. C., & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems.* Baltimore, MD: The International Dyslexia Association.

Nagy, W., Berninger, V., Abbott, R., Vaughan, K., & Vermeulen, K. (2003). Relationship of morphology and other language skills to literacy skills in at-risk second-grade readers and at-risk fourth-grade writers. *Journal of Educational Psychology, 95*(4), 730-742.

Nagy, W., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle-school students. *Journal of Educational Psychology, 98*(1), 134.

Nation, K., Clarke, P., Marshall, C. M., & Durand, M. (2004). Hidden language impairments in children: Parallels between poor reading comprehension and specific language impairment? *Journal of Speech, Language, and Hearing Research, 47*, 199-211.

National Association of School Psychologists (NASP). (2011). *Identification of students with specific learning disabilities* (position statement).

Nelson, N. W., Helm-Estabrooks, N., Hotz, G., & Plante, E. (2015). Test of integrated language and literacy skills (TILLS): Standardization version 2.0 [Assessment instrument]. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.

Noble, K. G., & McCandliss, B. D. (2005). Reading development and impairment: Behavioral, social and neurobiological factors. *Journal of Developmental and Behavioral Pediatrics, 26*, 370-378.

Norton, E. S., & Wolf, M. (2012). Rapid automatized naming (RAN) and reading fluency: Implications for understanding and treatment of reading disabilities. *Annual Review of Psychology 63*(1), 427-452.

Orr, A. J. (2003). Black-White differences in achievement: The importance of wealth. *Sociology of Education, 76*, 281-304.

Otaiba, S.A., Lake, V.E., Scarborough, K., Allor, J., and Carreker, S. (2016). Preparing beginning reading teachers for K-3: Teacher preparation in higher education.Perspectives on Language and Literacy, 42(4).25-32.

Páez, M., & Rinaldi, C. (2006). Predicting English word reading skills for Spanish-speaking students in first grade. *Topics in Language Disorders*, *26*(4), 338.

Pearson Clinical (July 2016) *Pearson Clinical Assessment Solutions: A Dyslexia Toolkit Assessment.* Retrieved October 15, 2016 from www.pearsonclinical.com.

Pool, J. L. & Johnson, E. S. (2009). *Screening for reading problems in preschool and kindergarten: An overview of select measures.* Retrieved from http://works.bepress.com/juli_pool/5/

Pressley, M., & Allington, R. L. (2014). *Reading instruction that works: The case for balanced teaching*. New York, NY: Guilford Publications.

Psychological Corporation (2009). Wechsler individual test of achievement: Third edition [Assessment instrument]. San Antonio, TX: Psychological Corp.

Pugh, K., & McCardle, P. (Eds.). (2011). *How children learn to read: Current issues and new directions in the integration of cognition, neurobiology and genetics of reading and dyslexia research and practice*. Hove, UK: Psychology Press.

Pugh, K. R., Frost, S. J., Sandak, R., Landi, N., Moore, D., Della Porta, G., . . . Mencl, W. E. (2010). Mapping the word reading circuitry in skilled and disabled readers. In P. Cornelissen, P. Hansen, M. Kringelbach & K. Pugh (Eds.), *The neural basis of reading* (pp. 281-305). New York, NY: Oxford University Press.

Pugh, K. R., Mencl, W. E., Jenner A. R., Katz, L., Frost, S. J., Lee, J. R., . . . Shaywitz, B. A. (2000). Functional neuroimaging studies of reading and reading disability (developmental dyslexia). *Mental Retardation and Developmental Disabilities Research Reviews, 6*, 207-213.

Puranik, C., Petscher, Y., Al Otabia, S., & Catts, H. (2008). Development of reading fluency in children with speech and language impairments: A growth curve analysis. *Journal of Learning Disabilities,41*, 545-560.

Purcell-Gates, V., McIntyre, E., & Freppon, P. A. (1995). Learning written storybook language in school: A comparison of low-SES children in skills- based and whole language classrooms. *American Educational Research Journal, 32*, 659-685.

Read Naturally, Inc. (2014). www.readnaturally.com. St. Paul Minnesota.

Reiter, A., Tucha, O., & Lange, K. W. (2005). Executive functions in children with dyslexia. *Dyslexia, 11*, 116-131.

Rimrodt, S. L., & Cutting, L. E. (2007). Neurobiology of dyslexia. In *Neurobiology of Disease.* (593-598). Elsevier Inc.. doi:10.1016/B978-012088592-3/50055-4

Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education*. *17*(1), 51-65. doi:10.2307/1495395

Rueckl, J. G., Paz-Alonso, P. M., Molfese, P. J., Kuo, W. J., Bick, A., Frost, S. J., . . . Lee, J. R. (2015). Universal brain signature of proficient reading: Evidence from four contrasting languages. *Proceedings of the National Academy of Sciences, 112*(50), 15510-15515.

Ruggs, E., & Hebl, M. (2012). Diversity, inclusion, and cultural awareness for classroom and outreach education. In B. Bogue & E. Cady (Eds.), *Apply research to practice (ARP) resources*. Retrieved from http://www.engr.psu.edu/AWE/ARPResources.aspx

Sahoo, M. K., Biswas, H., Padhy, S. K. (2015). Psychological co-morbidity in children with specific learning disorders. *Journal of Medical Primary Care*, *4*(1), 21-5.

Scarborough, H.S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S.B. Newman and D.K. Dickenson (Eds.) Handbook of early literacy research (p. 98). New York, NY: Guilford Press.

Scerri, T. S., & Schulte-Körne, G. (2010). Genetics of developmental dyslexia. *European Child & Adolescent Psychiatry*, *19*(3), 179-197.

Schumacher, J., Hoffmann, P., Schmäl, C., Schulte-Körne, G., & Nöthen, M. M. (2007). Genetics of dyslexia: The evolving landscape. *Journal of Medical Genetics*, *44*(5), 289-297.

Senechal, M., & Kernan, K. (2007). The role of morphology in reading and spelling. *Advances in Child Development and Behavior, 35*, 297-325.

Shafer, L., & Rastegari, I. (2016). Fixing the failure rate. Retrieved on October 16 from http://www.gse.harvard.edu/news/uk/16/06/fixing-failure-model

Shapiro, E. S. (2008). Tiered instruction and intervention in a response-to-intervention model. *RtI Action Network.*

Shaywitz, S. (2003) *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York, NY: Knopf.

Shaywitz, S., & Shaywitz, B. (2004). Reading disability and the brain. *Educational Leadership 51*(6), 6-11.

Shaywitz, S. E. (2005). *Overcoming dyslexia*. New York, NY: Alfred Knopf.

Shaywitz, S. E. (2016). Shaywitz dyslexia screen [Assessment instrument]. Bloomington, MN: NCS Pearson.

Siegel, L. (2006). Perspectives on dyslexia. *Paediatric & Child Health, 11(9),* 581-587. Retrieved on September 1, 2016 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528651/

Silinskas, G., Niemi, P., Lerkkanen, M. K., & Nurmi, J. E. (2013). Children's poor academic performance evokes parental homework assistance -- but does it help? *International Journal of Behavioral Development*, *37*(1), 44-56.

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, *38*(6), 934.

Strangman, N., & Dalton, B. (2005). Using technology to support struggling readers: A review of the research. *Handbook of Special Education Technology Research and Practice,* 545-569.

Telzrow, C. F., McNamara, K., & Hollinger, C. L. (2000). Fidelity of problem-solving implementation and relationship to student performance. *School Psychology Review*, *29*(3), 443.

Terras, M. M., Thompson, L. C., & Minnis, H. (2009). Dyslexia and psycho-social functioning: An exploratory study of the role of self-esteem and understanding. *Dyslexia*, *15*(4), 304-327.

Torgesen, J., Wagner, R., & Rashotte, C. (2015). Test of word reading efficiency: Second edition (TOWRE-2) [Assessment instrument]. Austin, TX: Pro-Ed.

Torgesen, J. K., Wagner, R. K., Rashotte, C. A., Burgess, S., & Hecht, S. (1997). Contributions of phonological awareness and rapid automatic naming ability to the growth of work-reading skills in second- to fifth-grade children. *Scientific Studies of Reading*, *1*(2), 161-185.

Torgesen, J. K. (1998). Catch them before they fall. *American Educator/American Federation of Teachers.*

Torgesen, J. (1998). Catch them before they fall. *American Educator*, *22*(2), 32-39.

Torgesen, J. (1999). Phonologically based reading disabilities: Toward a coherent theory of one kind of learning disability. In R. Sternberg & L. Spear-Swerling (Eds.), *Perspectives on learning disabilities* (pp. 231-262). New Haven, CT: Westview Press.

Torgesen, J., & Hudson, R. (2006). Reading fluency: Critical issues for struggling readers. In S. Samuels & A. Farstrup (Eds.), *Reading fluency: The forgotten dimension of reading success*. Newark, DE: International Reading Association.

VanDerHeyden, A., Burns, M., Brown, R., Shinn, M.R., Kukic, S., Gibbons, K., . . . Tilly, W.D. (2016). Four steps to implement RTI correctly. Retrieved on October 05, 2016, from http://www.edweek.org/ew/articles/2016/01/06/four-steps-to-implement-rti-correctly.html

Vargo, F. E., Grosser, G. S., & Spafford, C. S. (1995). Digit span and other WISC-R scores in the diagnosis of dyslexia in children. *Perceptual and Motor Skills, 80*, 1219-1229.

Vaughan-Jensen, J., Adame, C., McLean, L., & Gamez, B. (2009). Wechsler individual achievement test: Third edition (WIAT-III) [Assessment instrument]. San Antonio, TX: Pearson.

Villar, A. & Strong, M. (2007). Is mentoring worth the money? A benefit-cost analysis and five-year rate of return of a comprehensive mentoring program for beginning teachers. *ERS Spectrum, 25*(3), 1-17.

Wagner, R. K., & Torgesen, J. K. (1987). The nature of phonological processing and its casual role in the acquisition of reading skills. *Psychological Bulletin, 101*, 192-212.

Wagner, R. K., Torgesen, J. K., Rashotte, C. A., & Pearson, N. A. (2013). Comprehensive test of phonological processing: CTOOP-2 [Assessment instrument]. Austin, TX: Pro-Ed.

Walsh, K., Glaser, D., & Wilcox, D. D. (2006). *What education schools aren't teaching about reading and what elementary teachers aren't learning.* Washington, DC: National Council on Teacher Quality.

Washburn, E.K., Mulcahy, C.A., Joshi, R.M., and Binks-Cantrell, E. (2016). Teacher Knowledge of Dyslexia. Perspectives on Language and Literacy, 42(4). 9-14

Washington, J. A., Patton-Terry, N., & Seidenberg, M. (2013). Language variation and literacy learning. In C. A. Stone, E. R. Silliman & B. J. Ehrens (Eds.), *Handbook of language and literacy*. New York, NY: Guilford Press.

WWC, Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade, (July 2016). Retrieved July 26, 2016, from http://ies.ed.gov/ncee/wwc/PracticeGuide/21

Wechsler, D. (2014). Wechsler intelligence scale for children: Fifth edition (WISC-V) [Assessment instrument]. Bloomington, MN: Pearson.

West, M. R. (2016, February 5). From evidence-based programs to an evidence-based system: Opportunities under the Every Student Succeeds Act.

Wiederholt, J. L., & Bryant, B. R. (2012). Gray oral reading test: Fifth edition (GORT-5) [Assessment instrument]. Austin, TX: Pro-Ed.

Wiig, E. H., Semel, E., & Secord, W. A. (2013). *Clinical Evaluation of Language Fundamentals* (5th ed.). Bloomington, MN : Pearson.

Wolf, M., & Bowers, P. G. (1999). The double-deficit hypothesis for the developmental dyslexias. *Journal of Educational Psychology, 91*, 415-438.

Wolf, M., Miller, L., & Donnelly, K. (2000). Retrieval, automaticity, vocabulary elaboration, orthography (RAVE-O): A comprehensive, fluency-based reading intervention program. *Journal of Learning Disabilities*, *33*(4), 375-386.

Wolf, M., & Denkla, M. B. (2005). RAN/RAS: Rapid automatized naming and rapid alternating stimulus tests [Assessment instrument]. Austin, TX: Pro-Ed.

Wong, M. (2015, May 28). Stanford study on brain waves shows how different teaching methods affect reading development. Stanford News. Retrieved on July 15, 2015 from http://news.stanford.edu/news/2015/may/reading-brain-phonics-052815.html

Wood, F. B. (et al.) (2015). Predictive Assessment of Reading. 1Wake Forest University Health Sciences, Winston-Salem, NC 27157-1043, USA. fwood@wfubmc.edu

Woodcock, R. W., & Johnson, M. B. (1977). Woodcock-Johnson psycho-educational battery [Assessment instrument]. Allen, TX: DLM Teacher Resources.

Yoncheva, Y. N., Wise, J., & McCandliss, B. (2015). Hemispheric specialization for visual words is shaped by attention to sublexical units during initial learning. *Brain and Language, 145*, 23-33.

Zemelman, S., Daniels, H., & Hyde, A. A. (2005). *Best practice: Today's standards for teaching and learning in America's schools*. Portsmouth, NH: Heinemann. Retrieved July 26, 2016 from http://www.heinemann.com/shared/onlineresources/E00744/sample.pdf

Zygouris-Coe, V. (2001). *Balanced Reading Instruction in K-3 Classrooms.* Florida Literacy and Reading Excellence Center, College of Education, University of Central Florida.