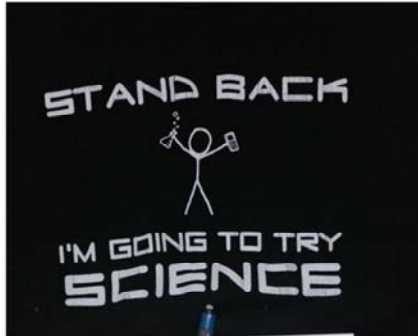
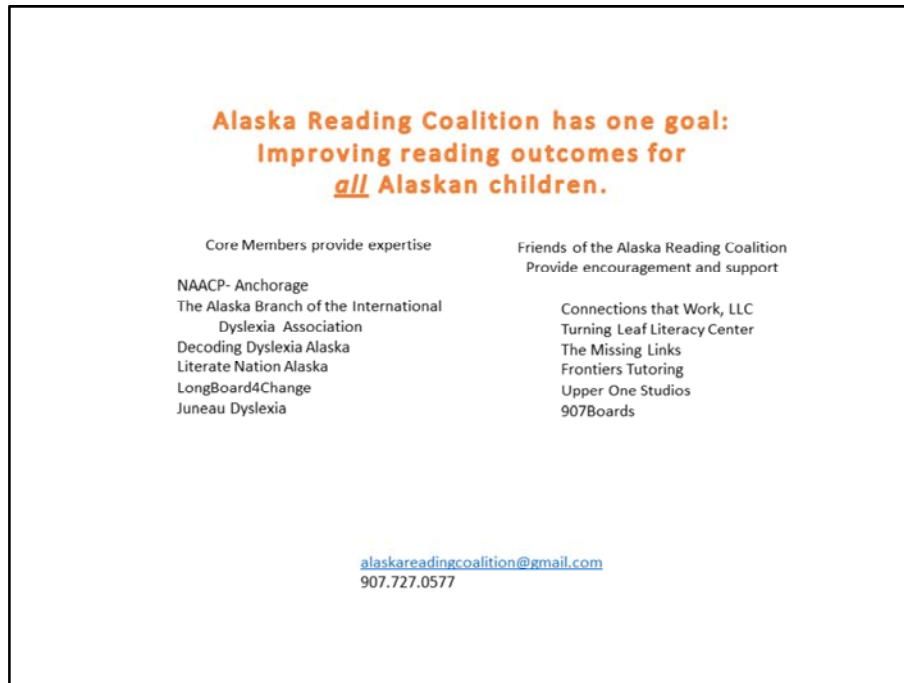


Welcome to:
Dyslexia Science is Reading
Science for All



- Welcome to Dyslexia Science is Reading Science for All
 - Welcome Dyslexia Science is Reading Science for All. Stand back! I'm going to try science!



- Alaska Reading Coalition has one goal: Improving reading outcomes for all Alaskan children.
 - The Alaska reading coalition has one goal: improving reading outcomes for all Alaskan children. We have core members who provide expertise and voice. The NAACP-Anchorage, the Alaska Branch of the International Dyslexia Association, Decoding Dyslexia Alaska, Literate Nation Alaska, LongBoard4Change, and Juneau Dyslexia.
 - We also have a lot of friends who provide encouragement and support. They include Connections that Work, Turning Leaf Literacy Center, The Missing Links, Frontiers Tutoring, Upper One Studios with Rick Mallars, and your school to business partnership, 907Boards.
 - Feel free to contact us at alaskareadingcoalition@gmail.com or you can text me at 907-727-5077. Thank you.

Who we want to help

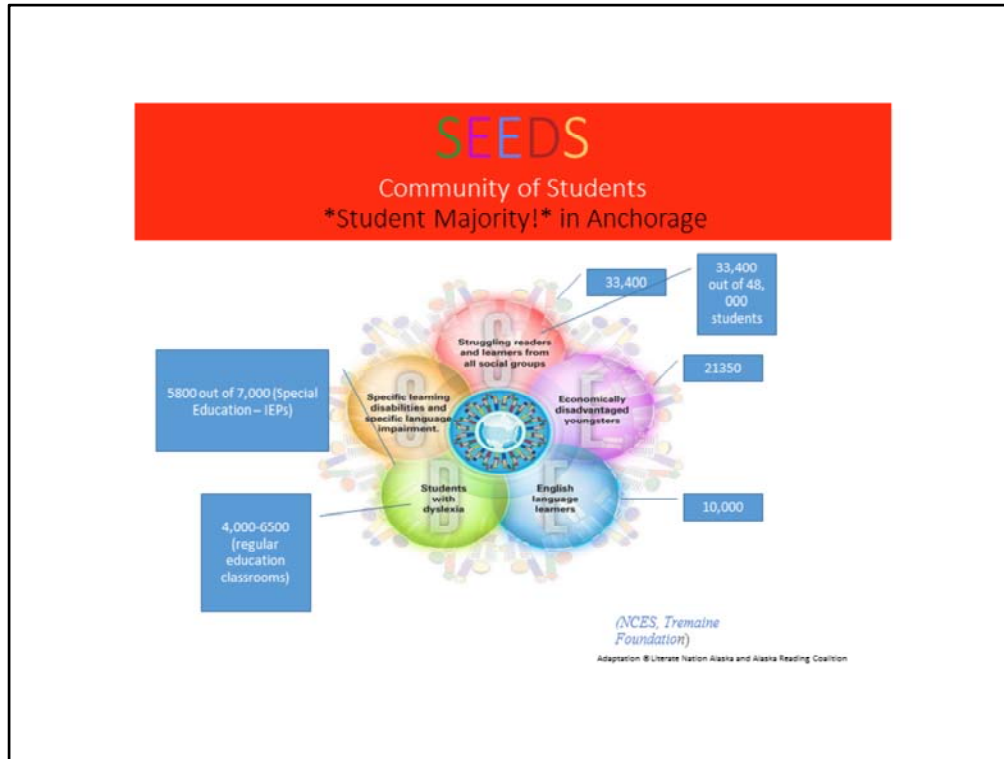
All kids who are learning to read.



alaskareadingcoalition@gmail.com
907.727.0577

Who we want to help:

We want to help all kids who are learning to read.



Let's take a look at our kids in the SEEDS Community of Students. *The Student Majority in Anchorage, Alaska, and the Nation.* Picture who these SEEDS students are in Anchorage. They are the 70% of all students in Anchorage reading at basic or below basic.

SEEDS is an acronym that describes:

Struggling readers from all socio-economic groups. About 33,400 out of 48,000 students in the Anchorage School District struggle to learn to read.

Economically disadvantaged youngsters. In Anchorage about 21,000 of them live in economic poverty and thus they are at risk for learning to read.

English-language learners in Anchorage. We have about 10,000 in Anchorage which puts them at risk in reading. Students with **Dyslexia** in the regular classroom, about one in five students. That is about 4000 to 6000 in the regular classroom. The rate is about 15 to 20%.

In **Special Education**, about 5800 out of 7000 students are dyslexic.

That is a total of about 10,000 students with dyslexia in the Anchorage School District.

This SEEDS mandala shows us that struggling readers are found across all populations from the wealthy to the disadvantaged, English language learners and the students with dyslexia and those students with dyslexia served under special education. The good news is that science tells us that 33,400 students out of 48,000 students who struggle to learn to read all have the ability to become fully literate citizens of Anchorage.

Sources of data

<http://www.ies.ed.gov/ncser/pubs/20123000/pdf/20123000.pdf>

<http://www.asdk12.org/aboutasd/> accessed June 7, 2016

<http://www2.ed.gov/programs/osepidea/618-data/static-tables/2014-2015/part-b/child-count-and-educational-environment/1415-bchildcountandedenvironment-3.xlsx>

<http://nces.ed.gov/nationsreportcard/states/Default.aspx?st=ak>

http://www.asdk12.org/depts/assess_eval/report_cards/1415/DistrictReportCard.pdf

Goals of today's Joint Meeting

1. Explain why the science of dyslexia drives reading science for all beginning readers
2. Ideal scenario with a Highly Knowledgeable and Skilled Teacher of Reading: Presented by kids.
3. Overview of policy considerations
4. It will take at least **3-5 years** to achieve the teacher preparation and professional development needed to bring all Anchorage children up to reading proficiently. This would be equivalent to about 15 college credit course hours.



Anchorage in Crisis: The Literacy Time Bomb-

©Literate Nation Alaska and Alaska
Reading Coalition

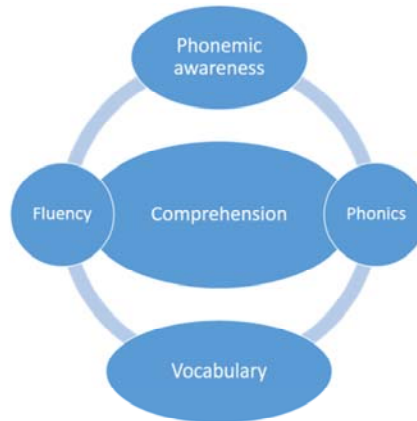
- Anchorage in crisis: the literacy time bomb
 - 33,000 out of 48,000 Anchorage kids are not reading proficient. Anchorage's reading scores have demonstrated this on the Alaska Measurements of Progress. This is a crisis.
 - Our Alaska Measures of Progress scores in Anchorage are very close to the Alaska's National Assessment Of Educational Progress reading scores and show evidence that the Anchorage reading time bomb has exploded.
 - According to 40 years of National Institute of Health Center's research, scientific consensus makes it clear that it is absolutely possible to reverse the decades of reading failure in Anchorage, Alaska, and across the nation.
 - There is an entrenched deficit in teacher preparation programs along with teacher professional development offerings that creates a huge problem in reaching our reading goals. We want those 33,000 students to be proficient readers.
 - There are complex reasons why our children are not reading proficiently. In this presentation we were going to highlight some of them. We believe the most important one is...

[illegible]

- Many colleges of education programs do not ensure that teacher candidates graduate with the scientific and evidence-based knowledge needed to teach reading.
- Teacher educators and professional development departments throughout the country lack an in-depth understanding of the essential components of early reading instruction. This means that they are unable to give this knowledge to their teacher candidates. They cannot pass on what they themselves do not know.
- We believe we are going into our **third** generation of college professors who do not have this knowledge base. Hence, a huge gap exists between the advanced knowledge of reading science known to preeminent scientists and researchers in reading and the practical knowledge of practitioners, our teachers in local schools.
- This is one of many reasons that our children's reading scores in Alaska and Anchorage will remain critically low unless something changes. What do these scientists know that we don't know?

What are the big five components of scientific reading instruction?

Hoist
Hoit
Hoits....? Hoist



- **What are the big five components of scientific reading instruction?**
 - **Phonemic awareness.** The ability to easily understand and **manipulate** sounds in words and how they change from word to word. Hoist has four sounds. If I tell a student with good phonemic awareness to take out the /s/ sound they will do so and know that now there are only three sounds. If you don't have the skill you might ask, What /s/ sound are you talking about? Hoit. If I ask you to add back the /s/ at the end, and you don't have good phonemic awareness skills you might end up with Hoits or you might end up back at hoist. Phonemic awareness is critical in learning to read whether you are aware of it or not.
 - **Phonics:** phonics is simply knowing that the letter r is said /r/. The letter f is said /f/. The letters ee is said /e/. There are eight ways to spell the long /a/ sound in the English language. And phonics instructs us when to use which spelling. Italian, Finnish, Spanish have only one letter per sound so those language are easier to read and spell.
 - **Vocabulary** includes understanding Latin and Greek roots words, prefixes and suffixes
 - **Fluency** is reading in a manner that all letters, spellings, words, connected text, and vocabulary are processed automatically and efficiently so that your brain is free to comprehend the text and it think deeply about what you have read.
 - **And we must have comprehension because that is the goal of reading.**

❏ http://www.scsk12.org/scs/subject-areas/kweb/images/nationalreadingpanel_faq.pdf

AIMSWeb© does NOT measure phonemic manipulation or blending! To fully assess phonemic awareness, we need to use a two stage process.

Phonemic awareness

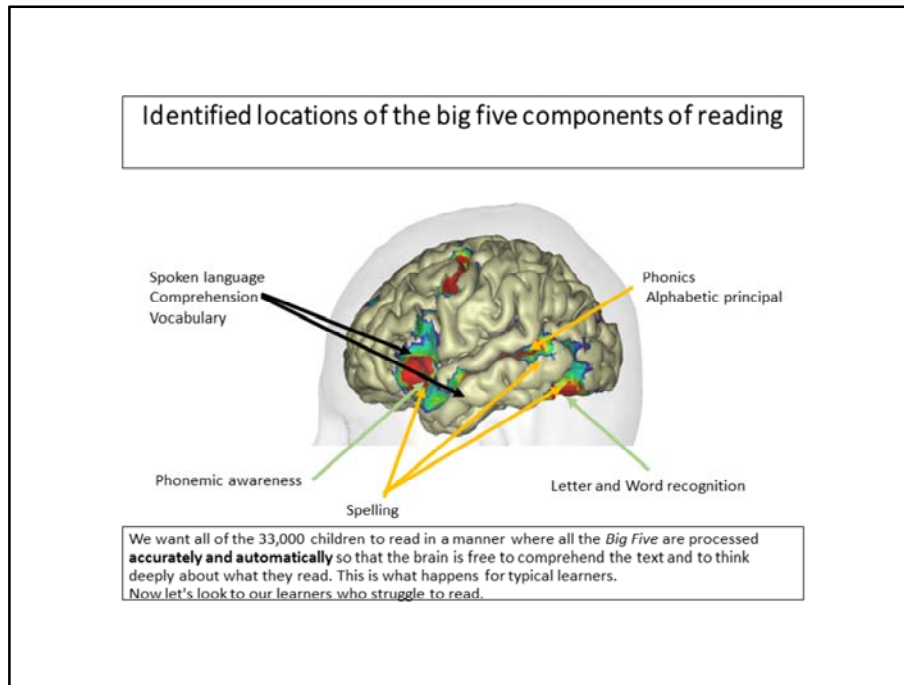
- “Despite its popularity in educational contexts, phonological segmentation may be less useful than phonological manipulation or blending in assessing the phonological substrates of reading at these grade levels.” Kilpatrick
- From Kosanovich’s work, K-1 students must identify, count, blend, segment, add, and substitute sounds in words. This means that these skills must *all* be assessed in at-risk students.
- Two stage assessment process: First, use a universal screener like AIMSWeb©. Then on the lowest 10% of students investigate further with the CTOPP-2: Comprehensive Test of Phonological Processing–Second Edition, the –free- Phonological Awareness Skills Test (PAST), and if needed, give the Lindamood Auditory Conceptualization Test – Third Edition (LAC-3).

Deeper dive on phonemic awareness.

AIMSWeb© does NOT measure phonological manipulation or blending!

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- 40 years of National Institute of Health Science has shown us where these critical skills are located in the brain. They are in particular parts of the brain that we have identified on fMRIs. Now I want to show you where in the brain these components are processed. I’m taking a deep dive here but stay with me.

- ❑ http://www.scsk12.org/scs/subject-areas/kweb/images/nationalreadingpanel_faq.pdf
- ❑ Canadian Journal of School Psychology June 2012 vol. 27 no. 2 150-165 Phonological Segmentation Assessment Is Not Enough: A Comparison of Three Phonological Awareness Tests With First and Second Graders
- ❑ <http://www.wrightslaw.com/bks/aat/ch6.reading.pdf>
- ❑ P 13 BUILDING THE FOUNDATION: A Suggested Progression of Sub-skills to Achieve the Reading Standards: Foundational Skills in the Common Core State Standards



We have Identified the locations in the brain across all languages and all scripts where the big five components of reading are processed.

Phonics learning the alphabetic principle are processed in this area of the brain. We can actually see the areas of activity in the brain on functional MRIs when we learn to connect a letter to a sound.

The critical skill of phonemic awareness happens in this part of your brain towards the front a little.

The ability to automatically identify this letter or this word in less than 150 ms is processed in this area of the brain.

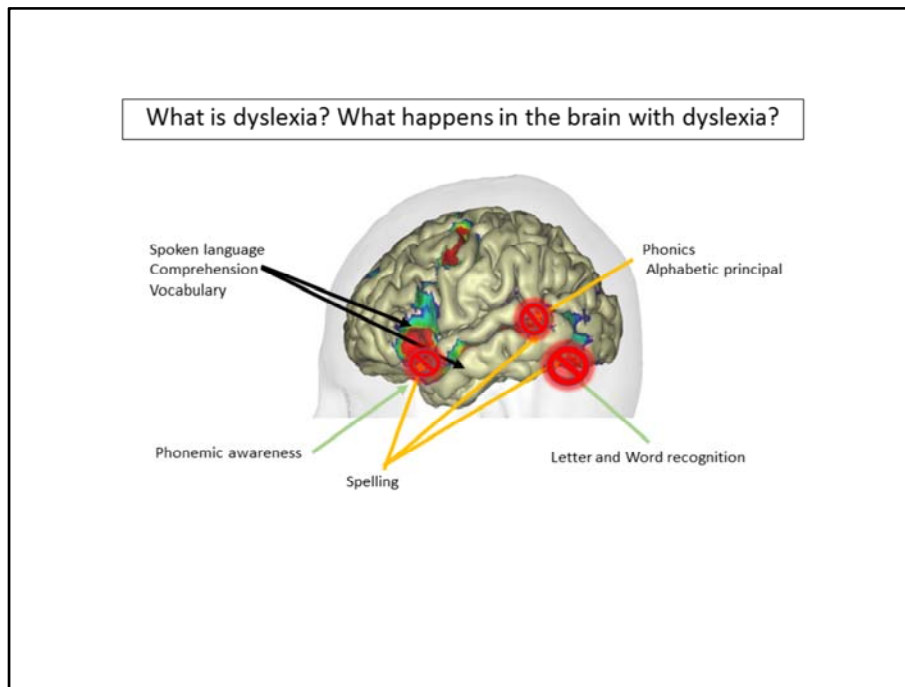
Spelling requires all of these areas of the brain.

Finally, comprehension and vocabulary happen in these two areas of the brain and are very well connected with spoken language.

We want all of the 33,000 children in Anchorage below proficient to read in a manner where all of the big five skills are processed in the brain accurately and automatically. This means that the brain is free to comprehend the text and to think deeply about what is read. For typical learners these areas of the brain are well connected and have strong fast neurons. Now let's look at our learners who struggle to read. We want to know what happens when reading is very difficult as in the condition of dyslexia.

<http://politicaspUBLICAS.uc.cl/wp-content/uploads/2016/03/Stan.pdf> (Wolf & Katzir-Cohen 2001)

K. Monzalvo et al. Neurolmage 61 (2012) 258-274



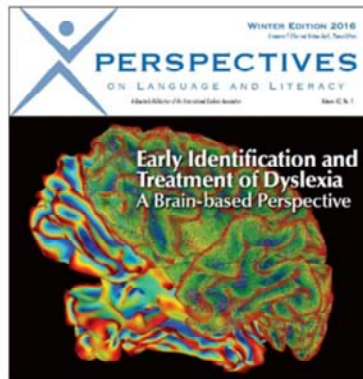
- What is dyslexia? What happens in the brain with dyslexia?
 - Simply put those critical areas of the brain in a student with dyslexia are not connected with the rich neural networking that makes it easy to learn to read and to spell. These areas are usually in the left hemisphere of your brain. In a person with dyslexia, the connections are weak.
 - Unless a student with dyslexia receives early identification and scientific brain changing instruction in the right dose, students with dyslexia will suffer and struggle needlessly, and this struggle can have lifelong consequences.
 - It is critical to understand that students with dyslexia will need accommodations, because it will continue to take more time to read the quantity of required work in school. We refer to dyslexia is a major time-robber in our lives. Even now as an adult with dyslexia, I assure you when I have to read or write something it will take three times longer than an adult without dyslexia will to achieve the same quality of work.
- K. Monzalvo et al. NeurolImage 61 (2012) 258-274

This means that students with dyslexia have trouble with:

- Learning to speak
- Learning letter names and their sounds
- Phonemic awareness and phonological awareness
- Organizing written and spoken language
- Memorizing number facts
- Reading quickly enough to comprehend
- Persisting with and comprehending longer reading assignments
- Spelling
- Learning a foreign language
- Correctly doing math operations

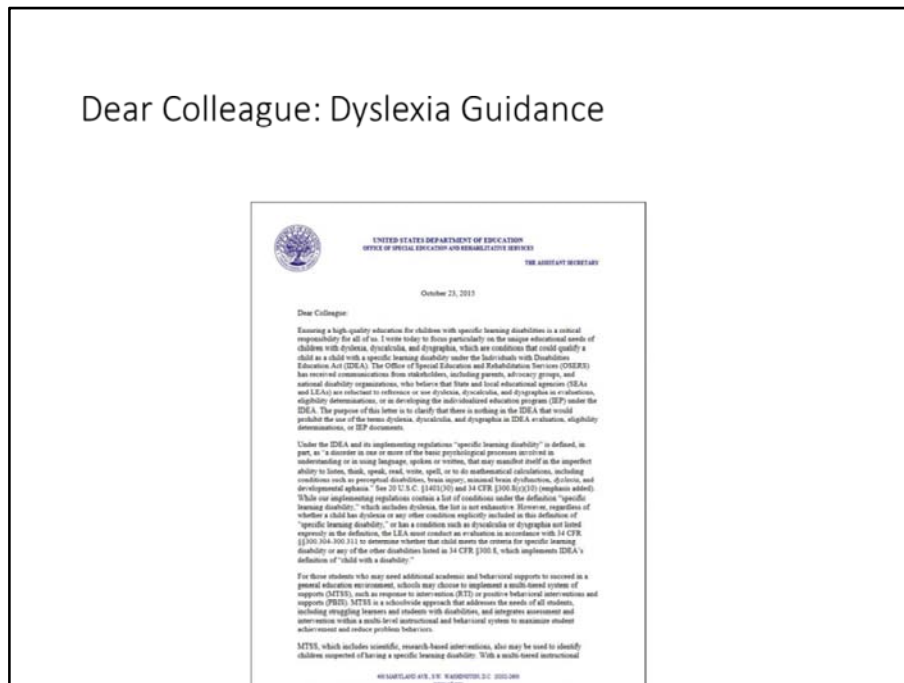
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 - Persisting with and comprehending longer reading assignments
 - Spelling
 - Learning a foreign language
 - Correctly doing math operations
 - Are there policy choices that a city or district could choose that would support students with dyslexia? There are. And what we have shown is that when you support students with dyslexia, the number of students in the advanced reading levels doubles. That's because techniques to teach students with dyslexia help all readers. Let's talk about one policy, early identification and intervention for students with dyslexia.
- <https://dyslexiaida.org/dyslexia-basics/>

Policy Considerations



- Policy considerations
 - Early identification and treatment of dyslexia: a brain-based perspective
 - The science of dyslexia is enabling the identification and prevention of reading failure for our kids earlier into childhood. I can give a four-year-old child the Comprehensive Test of Phonological Processing-second edition in 30 minutes and along with taking a genetic history of that child, I will have approximately an 86% chance of predicting if that child will struggle with the big five components of reading. This may be shocking news to you.
 - Anchorage could choose to be on the cutting edge of early identification and prevention by seeking to participate in dyslexia and reading research projects at the National Institute of Health. Brett Miller is your contact and I would be glad to get you in touch.
 - This is only one of the policies that cities like Anchorage could find powerful in helping to improve reading outcomes.
 - Mayors and city assemblies are increasingly using their leadership capacity and access to city resources to strengthen and support public schools - even when they have no formal authority over school districts.
 - I want to show you another policy consideration. It is a letter from last fall from the United States Department of Education, the Office of Special Education and Rehabilitation Services authored by the Assistant Secretary of Education.

Dear Colleague: Dyslexia Guidance



- This is a letter on dyslexia guidance. A copy of this letter is in your packet and if you search YouTube, you will find an interview by Assistant Secretary of Education Michael Yudin.
- This letter is a roadmap for policies that cities, states or school districts could use to guide and implement the identification and interventions necessary for the success of students with dyslexia. Briefly I'm going to point out three important benefits for our children in this letter.
 - First, this letter explains why the term dyslexia should be allowed to be used in schools. Simply there is nothing in The Individuals with Disabilities Education Act that prohibits the use of the terms dyslexia, dyscalculia, and dysgraphia in an evaluation, eligibility determination, or IEP documents.
 - This letter states that state educational agencies and local educational agencies should have policies in place that allow for the use of these terms.
 - The letter states that personnel responsible for IEP implementation need to know about this condition, for example, that a child has a weakness and decoding skills as a result of that child's dyslexia.
 - This letter should clear up the confusion about the use of the term dyslexia throughout the educational system.

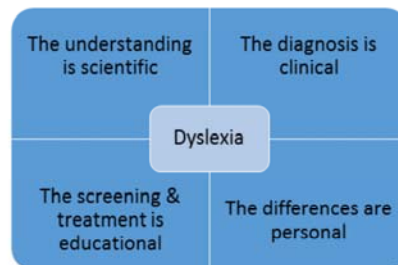
MIT's Dr. Gabrieli explains why saying the term Dyslexia is confusing

*Quote from Dr. John Gabrieli, MIT McGovern Institute for Brain Research
2015 letter to the Education Committee*

"There are many gaps between the research and the classroom. A mother called saying that her child was struggling to read, but her school told her that was no such thing as "dyslexia". This confusion arises because the public and most scientific publications use the term "dyslexia", but the educational community often uses the broader term of Specific Learning Disability (SLD) to refer to all learning disabilities. *Proper use of the term "dyslexia" could put teachers, parents, and researchers on the same page when considering what educational practices would most help these children.*"

- At MIT Doctor Gabrieli explains why saying the term dyslexia is confusing.
 - "There are many gaps between the research and the classroom. A mother called saying that her child was struggling to read, but her school told her that there was no such thing as "dyslexia". This confusion arises because the public and most scientific publications use the term "dyslexia", but the educational community often uses the broader term of Specific Learning Disability (SLD) to refer to all learning disabilities. Proper use of the term "dyslexia" could put teachers, parents, and researchers on the same page when considering what educational practices would most help these children."

Understanding Dyslexia in the schools.



16

- We must understand dyslexia in the schools.
 - The understanding of dyslexia is scientific.
 - The diagnosis is clinical. School psychologists and speech pathologists in their scope of practice can diagnose dyslexia along with medical doctors neuropsychologists speech pathologists outside of the educational system.
 - Importantly for teachers, the screening and treatment for dyslexia is educational, but the problem is that the universities have not taught them how to do this.
 - The differences in dyslexia are personal, i.e., unique to each individual person. This is because each child will have unique strengths and weaknesses in each of the five components of reading.

DYSLEXIA from M. B. Rawson: Understanding Dyslexia in the schools.

http://www.memphisdyslexia.org/articles/margaret_rawson.pdf

What does this mean for
teachers of reading?
Knowledge is Power!

- **What does this mean for teachers of reading? Knowledge is power! And here the kids to demonstrate this.**
 - Kids thank you so much for helping us demonstrate what a night deal situation could look like in an Anchorage classroom. Let's give them a chance to settle back in their chairs or go on about their day. And kids remember, Longboards for Change is starting their art contest linking long boards to literacy and reading, make sure you go sign up. Bye.
 - There are many myths about learning to read and dyslexia that get in the way of having an ideal teacher preparation and professional development program. One of the biggest myths is that dyslexia is a visual problem.

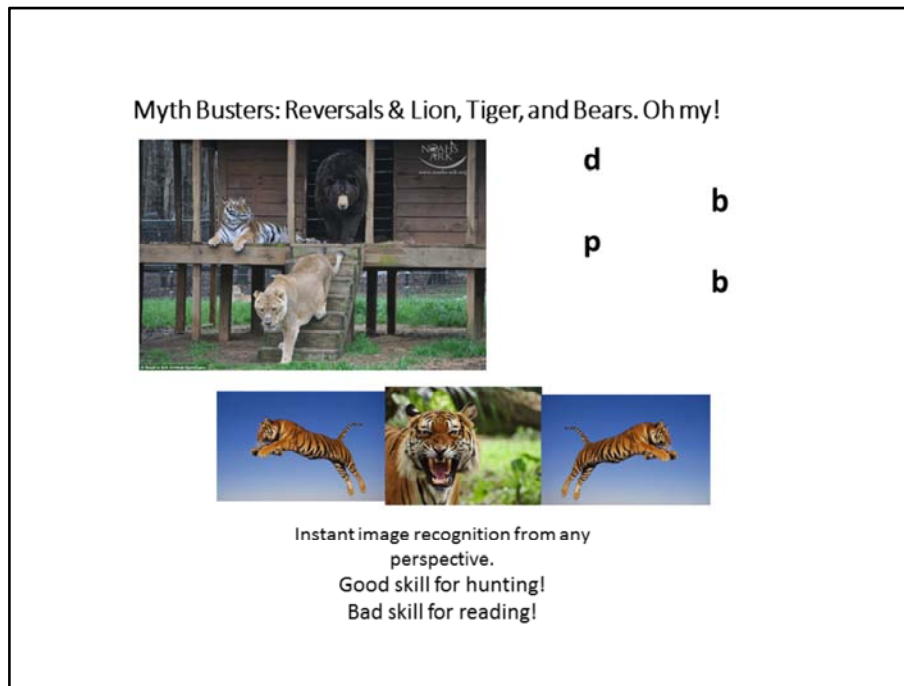
<http://ec.ncpublicschools.gov/conferences-profdev/annual-conference/2015/conference-materials/session-25.pdf>

Nancy Hennessy Nov 18-20 2015 at Public Schools of NC 65th conference on Exceptional Students

Myth Busters: Seeing is Not Reading
therefore reading problems are not
“seeing” problems unless your eyes
and optic nerve are damaged.



- **Myth Busters: Seeing is Not Reading**
 - Seeing is not reading, therefore, reading problems are not “seeing” problems unless your eyeballs and optic nerve are damaged. Reading happens in your brain and it starts at the back of your brain. People with dyslexia see things just fine. Their muscles work just fine. They do not see things backwards.
 - Letter reversals are another myth. Everyone has a critical survival skill that works well when we are hunting but not so well when we are reading.
- Photo credit: Photo credit: CLIPAREA.com/Folotia



- **Myth Busters: Reversals & Lion, Tiger, and Bears. Oh my!**
 - We all have the capability to recognize an image is the identical object from any perspective.
 - Just ask an artist how useful this capability is in sculpture.
 - In the natural world, this reversal capability usually does not affect the identity of natural objects: CLICK “a tiger is equally threatening to us when seen in the right or left profile.”
 - We have to unlearn this critical human survival skill to consistently recognize these letter and words. It is very difficult for us to un-learn anything.
 - So we want you to bust the myth of making reversals so important. Lions and tigers and bears oh my.
 - This is a natural skill of instant image recognition from any perspective that is a good skill for hunting! But a bad skill for learning to read.
 - We really should be worrying about the implementation of response to intervention the response to instruction.

<http://www.dailymail.co.uk/news/article-3472062/Lion-tiger-bear-brothers-living-Georgia-animal-shelter-haven-t-left-s-15-years.html>

Noah’s Ark Animal Sanctuary for picture

Response to
Intervention/Instruction
and the Big Secret is...

- **RTI**
 - Response to intervention was the result of some really exquisite research that led to a national initiative to address our reading failure. It used data to show progress in reading but a critical element was left out. Our teachers were not prepared in the fluent knowledge and use of evidence-based intervention and instruction. We just jumped into collecting data. Ms. Allison from our skit graduated from Dyslexiacon University. On the day she graduated, she was fluent in the use of evidence-based intervention and instruction. She could teach any kid to read because she could teach a student with dyslexia to read proficiently.
 - This is our dream. If we achieve our dreams in Anchorage and Alaska, we would experience a seismic improvement in its economy. Let me show you some numbers. I want to show you a table from Eric Hanushek of the Hoover Institution in their April 2016 study titled, Economic Gains for US States from Educational Reform in which each states gain in gross domestic product can result from education reform.

Kilpatrick, D. A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. Hoboken: John Wiley & Sons. <http://doi.org/9781118845400>

Hoover Institute 2016 Nationwide study

Improvement	Discounted reform billion \$'s	% current GDP	% future GDP without reform
1. % stnd deviation	157	262	5.6
2. Equal Minnesota	191	318	6.8
3. Equal division best (WA)	54	91	1.9
4. All at least basic	101	168	3.6
5. Single state to best (MN)	54	90	1.9
6. Equal Canada	195	325	7.0
7. Equal Finland	232	386	8.3

- This table illustrates how education reform in reading can create an economic boon from addressing the reading problems in Anchorage and Alaska.
 - Let's focus only on line number four. This line demonstrates an Alaska specific increase in the gross domestic product that would occur if we brought all Alaskan children performing below basic simply up to basic in reading achievement alone. While Eric's study focused on math he assured me by phone that the results would see the same increase if he had focused on reading. This represents an increase of \$101 billion, in today's terms to Alaska's GDP.
 - Even if the study had a margin of error of plus or minus 25%, that's still a tremendous economic benefit. Since Anchorage is the largest population center, it would see the most economic benefit. We would have approximately a \$50 billion increase in Anchorage's gross domestic product.
 - [It Pays to Improve School Quality](#). Eric A. Hanushek, Jens Ruhose, Ludger Woessmann. *Education Next*, 16(3), Summer, Summer 2016, pp. 16-24.
 - http://educationnext.org/files/ednext_XVI_3_hanushek_alaska_projections.pdf
 - EricA.Hanushek,JensRuhose,andLudgerWoessmann,"Itpaystoimproveschoolquality :Statesthatbooststudentachievementcouldreaplargeeconomicgains,"EducationNext,Summer2016

Uniquely, Denver used a Municipal Bond to fund teacher training and intervention in early literacy.

Mill Subcommittee: Evidence-Based Investments that we can Expect to Deliver



Invest Early: Early Literacy

WHY INVEST HERE:

- \$6.8M in strategic investments in DPS' Early Literacy Strategy which is based on research and best practice from around the nation
- Students who are able to read by 3rd grade are **4 times more likely to graduate** than students who cannot.
- Only half (52%) of DPS 3rd graders were reading at or above grade level in SY 2014-15

- In your packet you will find a few pages from Denver's municipal bond that funds teacher training and intervention in early literacy.
 - There are many options, choices and tools to get to our goal. It would probably take a combination of public and private enterprises. Other states like Connecticut, Florida, and the Carolinas have been successful. Denver has started an investment process using bonds to fund teacher training in early intervention as part of their plan to achieve this return on their investment.
- http://bond.dpsk12.org/wp-content/uploads/2016/04/2016-Mill-Subcommittee-Meeting-5_Draft-update.pdf

More policy options

1. The National League of Cities is working on improving reading. Anchorage could join them.
2. Follow the Roadmap from the Guidance letter from the US Department of Education on Dyslexia
3. Make students with dyslexia eligible for special education by supporting the State School Board in adding dyslexia specific language to regulations.
4. Fund a City-wide team of well-trained volunteer reading coaches supported by the best in online virtual reading interventions.

(NOTE: after 22 years in this field I am thrilled to say there are two that are really work!)

- We have some ideas about more policy options:
 - The National League of Cities is working on improving reading. Anchorage could join them.
 - Anchorage, the district, and the state could follow the roadmap from the guidance letter from the US Department of Education on dyslexia and implement related policy.
 - We could make students with dyslexia eligible for special education by supporting the State School Board in adding dyslexia specific language into our regulations.
 - The municipality could fund a citywide team of well-trained volunteer reading coaches supported by the best in online virtual reading interventions.
 - After 22 years in this field, I am thrilled to say that now there are two online virtual reading interventions that really work!

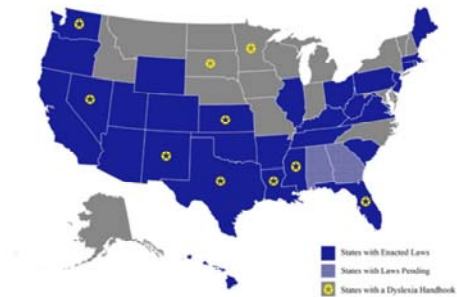
<http://www.nlc.org/find-city-solutions/institute-for-youth-education-and-families/early-childhood> with <http://gradelevelreading.net/>

<https://www2.ed.gov/policy/speced/guid/idea/memosdcitrs/guidance-on-dyslexia-10-2015.pdf>



- Further, many states have new dyslexia laws. In your handouts there is an article that summarizes the laws and provides a model for what should be in a state dyslexia law.
 - You can see that Alaska is one of the 13 states without a dyslexia law, nor does Alaska have statutes, regulations, or even a handbook on dyslexia. In fact, teachers are rarely encouraged to use the word. If they were allowed to freely use the word dyslexia you might find that you have the least expensive source of teacher training about dyslexia. Many of our teachers do know about dyslexia but they have been stifled. These are your future leaders and peer-to-peer trainers who could become dyslexia specialists and certified dyslexia specialists that could be deployed throughout Anchorage.
- Courtesy of Nancy Mather and Martha Youman (*Courtesy of Nancy Mather and Martha Youman*)

Dyslexia Laws in the U.S.A.

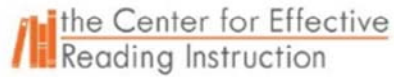


We need Highly Knowledgeable and Skilled Teachers of Reading

- If you can teach a student with dyslexia to read proficiently, you can teach any child or adult to read if.....
 - You give the instruction in the right dose
 - If principals provide the right building supports
 - Attend to co-morbid issues and conditions
 - Evidenced based instructional methods that cover all of the Big Five components of reading

- We need Highly Knowledgeable and Skilled Teachers of Reading.
 - If you can teach a student with dyslexia to read proficiently, you can teach any child or adult to read if
 - you give the instruction in the right dose and as early as possible.
 - If principals provide the right building supports
 - If you attend to co-morbid issues and conditions like ADHD and anxiety
 - You use evidenced-based instructional methods that cover all of the big five components of reading
 - How can you get certified dyslexia specialists who are highly knowledgeable and skilled teachers of reading and what you do with them?

Blueprint for a Literate Nation, Paperback: 668 pages **Publisher:** XLIBRIS (October 11, 2013) **Language:** English **ISBN-10:** 1493104691 **ISBN-13:** 978-1493104697 Cinthia Coletti



Hire one certified dyslexia specialists for each of our eight high schools whose responsibility would be to train all the teachers responsible for reading in the feeder schools for that high school.

Anchorage could deploy the dyslexia specialists as principles who would be accountable for their role as instructional leaders for all the teachers in their building who teach reading. This would be their responsibility.

- The International Dyslexia Association has started The Center for Effective Reading Instruction to certify dyslexia specialists. This means that Anchorage could
 - Hire one certified dyslexia specialist for each of our eight high schools whose responsibility would be to train all the teachers responsible for reading in the feeder schools and that high school.
 - Anchorage could deploy the dyslexia specialists as principals who would be accountable for their role as instructional leaders for all the teachers in their building who teach reading. This would be their responsibility.

<https://effectivereading.org/>



- SEEDS

- Let's remember the SEEDS students that we are trying to help. The 70% of students reading at basic or below basic. Remember that the mandala shows us that struggling readers are found across all populations from the wealthy to the disadvantaged, the English language learners and the students with dyslexia, and the students with dyslexia served under special education. Science tells us that they all have the ability to become literate and productive citizens.
- We are finally beginning to translate research about reading instruction into practice, and it is a complex translation. It will take time, exquisite planning, strong leadership, political will, and smart policies in place that are sustained beyond one administration.
- While dyslexia research is driving the reforms in reading instruction, all children will benefit. We have found that when we address the needs of students with dyslexia, the number of students in the advanced reading levels doubles and many in the basic reading level move into proficiency.
- Why does this happen? Because we have found that good reading instruction is good reading instruction.
- We've given you a number of routes, pathways, methods, and reasons that Anchorage as a city and the Anchorage school district could use to create a sustained improvement in reading performance for all struggling readers.
- Our coalition is actively trying to make changes and we seek ways to collaborate and partner to increase our capacity to reach our goals. We will continue to talk to legislators, the governor, teachers, administrators, and families and our faithful students with dyslexia to make it happen. We know that it will take time to solve a problem that the best in our nation haven't solved. But we are Alaskans. And we have faith in Alaskan's ability to solve problems and to think completely out of the box. Now if Ms. Henke and Carlson would assist on ASD policy we'll try to answer your questions.

Q & A

Core Members provide expertise

NAACP- Anchorage
The Alaska Branch of the International
Dyslexia Association
Decoding Dyslexia Alaska
Literate Nation Alaska
LongBoard4Change
Juneau Dyslexia

Friends of the Alaska Reading Coalition
Provide encouragement and support

Connections that Work, LLC
Turning Leaf Literacy Center
The Missing Links
Frontiers Tutoring
Upper One Studios
907Boards

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Alaska Reading Coalition has one goal: Improving reading outcomes for all Alaskan children.

Presentation is based on these references

- Cantlon, J. F., Pined, P., Dehaene, S., & Pelphey, K. A. (2011). Cortical representations of symbols, objects, and faces are pruned back during early childhood. *Cerebral Cortex*, 21(1), 191–199. <http://doi.org/10.1093/cercor/bhq078>
- Dehaene, S. (2011). The massive impact of literacy on the brain and its consequences for education. *Human Neuroplasticity and Education*, (October 2010), 19–32. Retrieved from <http://www.pas.va/content/dam/accademia/pdf/sv117.pdf#page=17>
- Dehaene, S. (2013). Inside the letterbox: how literacy transforms the human brain. *Cerebrum : The Dana Forum on Brain Science*, 2013(June), 7. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3704307&tool=pmcentrez&rendertype=abstract>
- Eden, G. F., Jones, K. M., Cappell, K., Gareau, L., Wood, F. B., Zeffiro, T. A., ... Carolina, N. (2004). Neural Changes following Remediation in Adult Developmental Dyslexia 4000 Reservoir Road. *October*, 44, 411–422.
- Kilpatrick, D. A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. Hoboken: John Wiley & Sons. <http://doi.org/9781118845400>
- Kosanovich, M. and Verhagen, C. (2012). *Building the foundation: A suggested progression of sub-skills to achieve the reading standards: Foundational skills in the Common Core State Standards*. Portsmouth, NH: RMC Research Corporation,
- Center on Instruction.
- Krafnick, A. J., Flowers, D. L., Napoliello, E. M., & Eden, G. F. (2011). Gray matter volume changes following reading intervention in dyslexic children. *Neuroimage*, 57(3), 733–741. <http://doi.org/10.1016/j.neuroimage.2010.10.062>
- McCandliss, B. D., Cohen, L., & Dehaene, S. (2003). The visual word form area: Expertise for reading in the fusiform gyrus. *Trends in Cognitive Sciences*, 7(7), 293–299. [http://doi.org/10.1016/S1364-6613\(03\)00134-7](http://doi.org/10.1016/S1364-6613(03)00134-7)
- Moats, L. (2009). Knowledge foundations for teaching reading and spelling. *Reading and Writing*, 22(4), 379–399. <http://doi.org/10.1007/s11145-009-9162-1>
- Moats, L., Chair, C., Carreker, S., Davis, R., Meisel, P., Spear-Swerling, L., & Wilson, B. (2010). Knowledge and Practice Standards for Teachers of Reading With Commentary for Dyslexia Specialists International Dyslexia Association, Professional Standards and Practices Committee 2010 Background: Why These Standards Are Necessary.