

Dyslexia screening for early identification

Oregon Senate Education Committee 2/16/17

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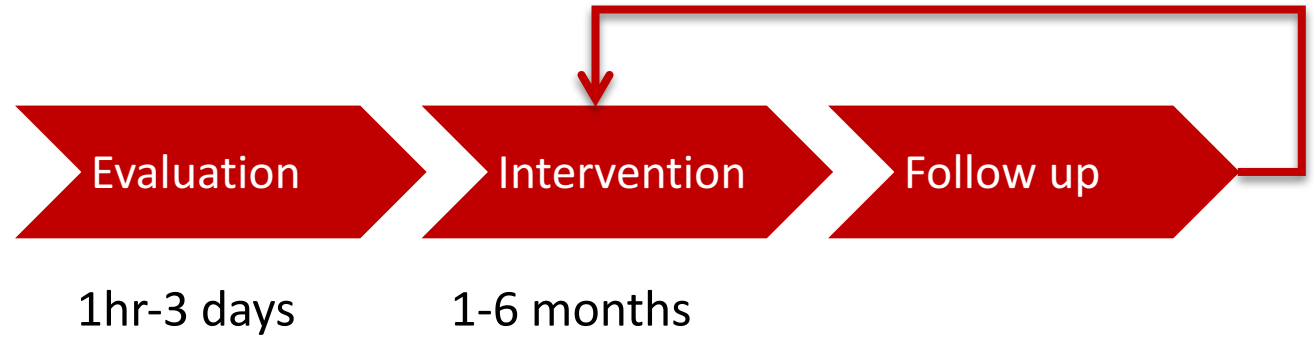
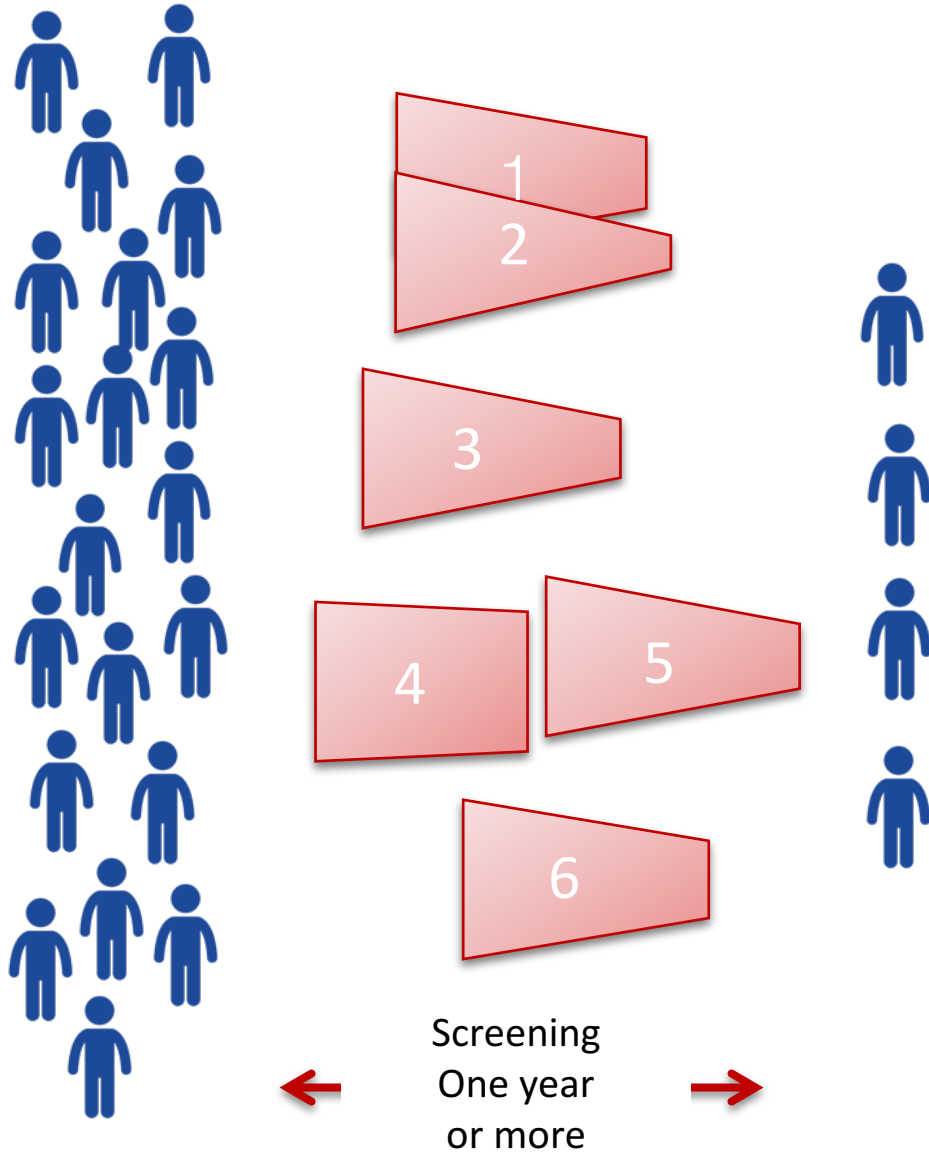
What can we agree on about dyslexia?

- Dyslexia is a **specific learning disability** that is neurobiological in origin. (IDA... and many states)
- **Early identification**, assessment, and proper interventions/instruction can help avoid negative outcomes.
- **Early screening** for those at risk for dyslexia is a good starting point.
- Dyslexia has nothing to do with the eyes

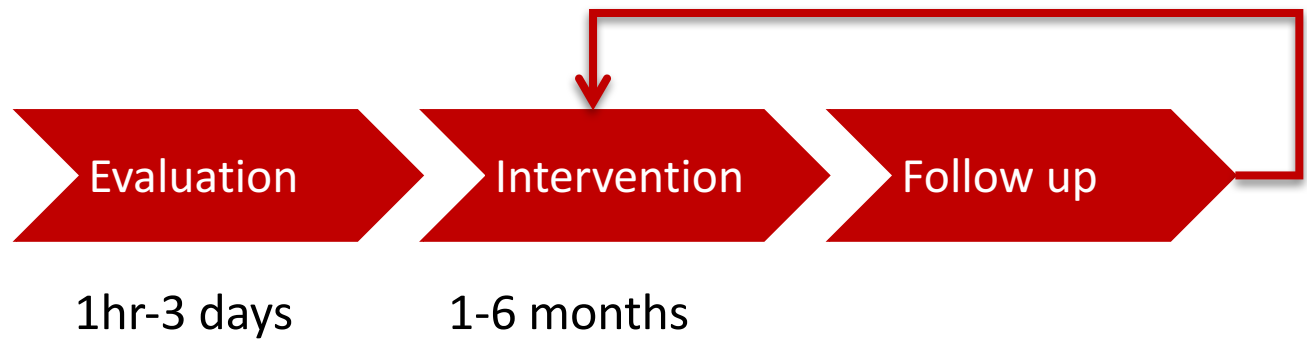
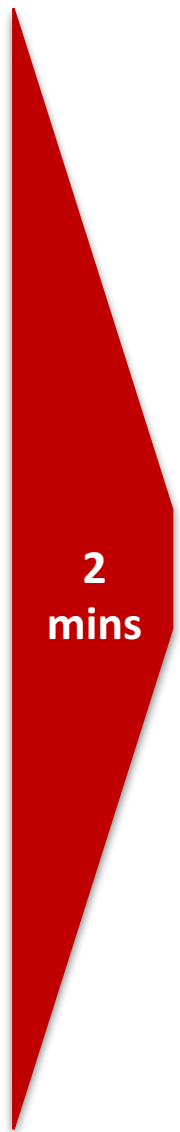
What makes a good screening method?

- It is fast and easy
 - Convenient and practical
 - Takes a minimum of time from the school, no manual processing
 - Clear result that's easy to understand
- It's objective
 - Everyone is measured the same way
 - Results can be aggregated and compared
 - *It's independent of the reading curriculum*
- It's accurate
 - It identifies the right children
 - It's evidence-based

Screening today



Screening with Optolexia





**Early
detection**



**Resource &
time efficient**



**Insight &
overview**



Accurate



optolexia

The cognitive process is reflected in the eyes

Low risk of dyslexia

Bävern är en mycket skicklig simmare. I vattnet når den hastigheter av mer än elva kilometer i timmen. För att skydda sig mot kylan har bäverns hud tusentals små hårstrån och ett tjockt lager med fett. Med hjälp av sina stora lungor kan den stanna under vattenytan mer än tjugo minuter utan problem.

High risk of dyslexia

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How it works

Recording of eye movements

2 min/pupil

AI-analysis

Machine learning

Accessible Results

70928	Ej risk	15 %
70529	Ej risk	2 %
70703	Ej risk	2 %
70924	Risk	69 %
70927	Risk	100 %
70114	Ej risk	3 %
70509	Saknas	
71012	Risk	75 %

Björkmyrs kommun

Skolor

Björkmyrsskolan 2016-10-28 8 175 173 20	Bergsskolan 2016-10-25 13 302 302 48	Stora långfjärdssk... 2016-10-25 6 149 149 13
Almaskolan 2016-10-27 14 282 281 40	Dolhemsskolan 2016-10-25 13 302 302 48	Malingskolan 2016-10-25 6 149 149 13

Overview & insight



2C 2016-10-25 20 20 3	2D 2016-10-25 19 19 6
3C 2016-10-25 21 21 2	3D 2016-10-25 26 26 3

Admin - Lars Lengquist Logga ut

Intern kommentar

Läsa text

78 ordmin

35 ordmin

68 ordmin

54 ordmin

62 ordmin

203 ordmin

98 ordmin

112 ordmin

79 ordmin

88 teckenmin

78 teckenmin

98 teckenmin

43 teckenmin

26 ordmin

51 ordmin

22 ordmin

Gödar					
Lina Hågmundsson	2008-01-01	Risk	93 %	78 teckenmin	26 ordmin
Linda Itonen	2008-01-01	Sj. risk	6 %	98 teckenmin	51 ordmin
Lars Lengquist	2008-01-01	Risk	95 %	43 teckenmin	22 ordmin
	2008-01-01	Sj. risk	0 %		

Current activities

- Pilot tests underway in the US
- Pilot tests planned for the UK
- Other countries and languages in planning

- House Education Committee yesterday
- **Senate Education Committee TODAY**
- Region 1 district-level staff on Friday – **seeking further pilot activities**

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Science & Technology

- 25 years of research
- +3 000 children screened in studies during 2015-2016
- 2000 children screened commercially
- Artificial intelligence
- Eye-tracking



In the 2015/2016 QS World University Rankings, KI is number 9 in the world and number 3 in Europe in the faculty area of Life Sciences and Medicine.

Optolexia compared with other screeners

- Measures reading itself rather than other indicators.
- Test is conducted privately and individually.
- Fine motor skills don't interfere with the result.
- Test is conducted at the child's own pace.
- School staff don't need to carry out, score or document results.
- Results don't depend on who carries out the screening.
- Provides an overview of many individual results, making resource planning easier.

Our history

