Options for Addressing Dyslexia in Institutions of Higher Education (IHE) Teacher Preparation Programs

Ohio Board of Regents Dyslexia Task Force on Pre-service Teacher Education

Presented at
The Regional Meetings of the OBR Dyslexia Task Force
Beginning Winter, 2013
Objectives

- Present an overview of dyslexia and recent dyslexia legislation in Ohio
- Present the work of the Ohio Board of Regents (OBR) Task Force for Pre-service Teacher Training in Dyslexia
- Explain the Task Force recommendations for colleges and universities
- Give an overview of the implementation process and timeline
- Answer questions and gather feedback
What is dyslexia? dys-lexia

- dys—difficulty
- lexia—with words

Adapted from Moats & Dakin, 2008
Overview

- Does not mean seeing things backwards
- Exists across all levels of intelligence
- Is a language-based learning problem
- Occurs at all socioeconomic levels
- Runs in families (neurologically based)
- Can be diagnosed before a child begins to read
- May develop even with good classroom instruction
- Is not caused by a lack of motivation
- Often co-occurs with other disorders such as ADHD and anxiety disorder

Adapted from Moats & Dakin, 2008
Dyslexia and Intelligence

The majority of dyslexic students have average or above average intelligence and are characterized by their ability to think “outside of the box”

- 35% of successful entrepreneurs are dyslexic including Charles Schwab and Richard Branson,
- but without early identification and effective instruction many potential entrepreneurs never learn to read and become HS drop-outs.
Dyslexia and Prison

- More than half of our prison population is dyslexic,
  - but dyslexics who learn to read are typically highly productive citizens.

- 3rd grade reading proficiency scores are used to predict the number of new beds that will be needed in prisons in 10 years.
Dyslexia and Teachers

The absence of appropriate teacher training in dyslexia is a serious problem:

- less than 14% of teachers are confident that they can recognize a dyslexic child.
- less than 9% of teachers feel confident that they could teach a dyslexic student to read.
- 4 out of 5 teachers have asked for extra training to teach dyslexic students.
Dyslexia in Schools

- 80-85% of students with an identified specific learning disability have a primary problem with reading and/or language

- As many as 20% or 1 out of every 5 students, has symptoms of dyslexia

Dyslexia has been listed in the Ohio Special Education Operating Standards as a Specific Learning Disability since 2008.

Still many Ohio school districts refuse to recognize or use the term “dyslexia”.

Parents of dyslexic children become confused and frustrated.

Parents often have to hire lawyer/advocate to help them understand their rights and to get school districts to agree to use appropriate teaching methods when working with dyslexic students.
Ohio Legislation

Dyslexia laws enacted December, 2011

- **HB96 (Celeste & Brenner)**
  Defines Dyslexia (IDA definition) and sets up a pilot program for the early identification and intervention for students at-risk for dyslexia. Rather than fund the 3 districts specified in the legislation, ODE funded eight school districts across Ohio to participate in this important 3-year pilot project.

- **HB157 (Schuring & Letson)**
  Permits Educational Service Centers (ESCs) to hire Dyslexia Specialists to do in-service teacher training in dyslexia. Also includes the IDA definition of dyslexia.
Ohio Legislation

SB316: 3rd Grade Guarantee enacted summer, 2012

- Requires that the reading improvement plan developed for each at-risk student.... includes, but is not limited to providing “skill development in phonemic awareness, phonics, fluency, vocabulary, and comprehension.”
  R.C. 3313.608
  (5 building blocks of reading, National Reading Panel)

- Requires that reading intervention services provide "intensive, explicit, and systematic instruction."
  R.C. 3313.608
Principles of Instruction

**Intensive:** one-to-one or homogenous (skill based) small group instruction for a minimum of 4-5 times per week, 45 – 60 minutes per session.

**Explicit:** Concepts are clearly and directly explained, no assumptions are made about the student’s ability to make inferences.

**Systematic:** Planned teaching of all useful correspondence patterns in a sequence of instruction; progress is in measurable and manageable steps. Skills are continually reviewed, practiced, extended, and once mastered, applied to more and more difficult text.

Adapted from Moats & Dakin, 2008 as submitted to the House Education Committee for definition of terms used in SB316
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.

Specific Learning Disability: Basic Patterns of Dyslexia

- Oral Expression – average or above
- Listening Comprehension – average or above
- Basic Reading Skills
  - Phonemic awareness – low/primary indicator
  - Phonics, word structure and word recognition – low/primary indicator
- Reading Fluency – low/primary indicator
- Reading Comprehension – may be low due to secondary effects of reading basic skills and fluency
- Written Expression –
  - Average or above in concepts
  - Low in spelling & syntax, primary indicators
- Mathematics Calculation – may be low
- Mathematics Problem Solving – usually average or above

- Andrist, 2012
Dyslexia: General Pattern

Concepts average or above average

Skills Low

Andrist, 2012
Neurobiological in Origin
A Theoretical Model Regarding the Brain Circuits for Reading (Pugh, Shaywitz, Eden, Simos)

- Wernicke’s area
- Angular gyrus
- Broca’s area
- Visual association areas
A Theoretical Model for the Brain Circuit for Reading (Component Processes)

Phonological processing: correspondence between letter and sound

Relay station; Cross-modality integration

Phonological processing: articulatory mapping

Graphemic analysis
Neurobiological Basis of Dyslexia

Eden et al., *Neuron*, 2004

From Moats & Dakin, 2008

Typical Readers

Dyslexic Readers
Dyslexia is caused by a weakness, or lack of talent, in the phonological domain of language including phonological memory and rapid naming.

This weakness in phonological processing makes it difficult to acquire phonemic awareness and alphabetic reading skills—which interferes with the growth of accurate reading skills.
What is Phonemic Awareness?

From Torgesen, 2005
Phonological Awareness and Phonemic Awareness

- **Phonological awareness:** An awareness of the various levels of the speech sound system, such as syllables, accent patterns, rhyme, and phonemes.

- **Phonemic awareness:** The most advanced level of phonological awareness; an awareness of the sounds that make up spoken words and an ability to manipulate sounds in words (Henry, 2003).

Damer, 2009
Inaccurate or Non-Fluent Word Recognition

Alphabetic Principle
Phonics and Word Recognition

The relationships between the letters (graphemes) of written language and the individual sounds (phonemes) of spoken language.  *Phoneme – Grapheme Mapping*

**shock**

/s/ /ő/ /k/

**box**

/b/ /ő/ /k/ /s/

Adapted from Moats & Dakin, 2008
Components of Word Identification

- **Phoneme**: An individual speech sound. (/ʃ/, /ɔ/, /p/)
- **Grapheme**: A letter or letter group that represents a speech sound or phoneme. (sh – o – p)
- **Morpheme**: The smallest linguistic unit in a word that has meaning. (shop + ed)
- **Syllable**: a word or a part of a word with one vowel sound. There are 6 basic syllable types in English.
I was perfectly happy disintegrating in the dark. I heard a scraping then a snap, sunlight flooded in. Ben picked me up in a pile of leaves. I jumped out he caught me I was stuck. Ben showed me to his family. I was flattered from all the ahhs and oohs. I got bagged, boxed and put it in the freezer for 5 months.

4th Grade writing sample of a dyslexic student

Adapted from Moats & Dakin, 2008
Often Unexpected
Phonological Language Ability is not highly Correlated with General Verbal Ability as measured by IQ tests.
Phonological Language Ability is not highly Correlated with General Verbal Ability as measured by IQ tests
Secondary Consequences

Shaywitz, 2003 based on Cunningham & Stanovich, 1998
Dyslexia Defined

- Specific learning disability
- Neurobiological in origin
- Deficit in phonological component
- Inaccurate or non-fluent word recognition
- Deficit in spelling and decoding abilities
- Often unexpected
- Secondary consequences

From Moats & Dakin, 2008
Ohio Board of Regents Task Force for Pre-Service Teacher Education in Dyslexia

Rationale:

- To formulate a plan to insure that all pre-service teacher candidates have the knowledge and skills needed to teach dyslexic and other at-risk students in the State of Ohio to read;

- To insure that dyslexic and other at-risk students receive the intense, explicit systematic instruction that they need to be able to read at grade level by the end of 3rd grade.
Task Force Timeline

- **Spring, 2011**: Task Force for Pre-service Teacher Training in Dyslexia approved by the Chancellor of the Ohio Board of Regents

- **Summer, 2011**: Task Force charge formulated; members appointed according to OBR guidelines

- **September, 2011 - May, 2012**: Monthly working meetings of the Task Force

- **June, 2012**: Task Force work completed; approved by Chancellor Jim Petro

- **Fall, 2012**: Selected presentations and feedback; final work products revised

- **Winter, 2013**: Final Task Force work products posted on the OBR website
**OBR Dyslexia Task Force Selection:**
15 task force members were chosen from across Ohio’s 5 geographic areas from a range of public versus private institutions and K – 12 Institutions versus Institutions of Higher Education (IHEs).

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OBR Task Force Membership Fall, 2012

Task Force Secretary, Stephanie Gorgon

Martha Chiodi, Ying Guoy
Michelle Hostetler, Pam Kanfer
Gayle Long, Martha Michael
Dorothy Morrison, Mary Heather Munger
Susan Nolan, Kathleen Oliverio
Earl Oremus, Dan Parent
Sherri Parent, Stephen Richards
Rebecca Tolson

Special thanks to former Task Force member Linda Revay, for her year of dedicated service.
In partnership with the Ohio Board of Regents (OBR), the Task Force for Pre-Service Teacher Training in Dyslexia will work with the International Dyslexia Association (IDA) *Knowledge and Practice Standards for Teachers of Reading* (2010) to develop guidelines for pre-service teacher education programs in Ohio.

The resulting new pre-service guidelines will be based on the specific knowledge and skills needed to identify, assess, provide appropriate instruction for and monitor the progress of individuals with dyslexia and others at-risk for reading failure as designated in the IDA standards.
IDA Knowledge & Practice Standards for Teachers of Reading

Knowledge Components:
A. Foundation Concepts about Oral & Written Language
B. Knowledge of the Structure of Language
C. Knowledge of Dyslexia & other Learning Disorders
D. Interpretation & Administration of Assessments for Planning Instruction
E. Structured Language Teaching in:
   - Phonology
   - Phonics & Word Recognition
   - Fluency
   - Vocabulary
   - Text Comprehension
   - Handwriting, Spelling & Written Expression
In order to determine how Ohio Teacher Education Standards compare to the International Dyslexia Association (IDA) Knowledge and Practice Standards (KPS), the following Ohio standards were mapped with the IDA KPS Standards:

- Ohio Standards for the Teaching Profession (OSTP)
- 12-semester hour Reading Requirement including the Phonics Requirement
- 3-semester hour Reading Content Course
- Reading Endorsement
- Literacy Specialist Endorsement
Summary of Mapping

Missing/Incomplete Knowledge Components (shown red):

A. Foundation Concepts about Oral & Written Language
B. Knowledge of the Structure of Language
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Task Force Recommendations for Pre-Service Teacher Training in Dyslexia:

To insure that all pre-service teacher candidates have the knowledge and skills needed to teach dyslexic and other at-risk readers to read, the Task Force proposed three program review options for pre-service teacher education programs in Ohio:

1. Criteria for evaluating IDA KPS across courses*
   (course rating scale)
2. Alternative stand alone phonics course
3. Competency Exam (available 2014)

All options are aligned with the IDA Knowledge and Practice Standards (KPS).

*Selected IDA standards for Adolescent and Young Adult education majors
OBR Dyslexia Task Force Recommendations

One Option Required for all Pre-Service Teacher Education Majors

OPTION 1: COURSE RATING TOOL
Early & Middle Childhood and Special Education

OPTION 2: ALTERNATIVE PHONICS COURSE
Adolescent & Young Adult

OPTION 3: EXAM Available, 2014

Post Graduate Certificate Programs for Teachers of Dyslexics & other at-risk readers

Accredited Programs
Certificate Programs offered by Accredited Ohio Institutions of Higher Education

Unaccredited Programs
Certificate Programs Accredited by a Professional Dyslexia Organization
Option 1: Course Rating Scale
Criteria for Alignment with IDA Standards

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<th>Knowledge Component</th>
<th>Rating Scale</th>
<th>Criteria for Alignment with Standards</th>
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<td>1. Foundation Concepts about Oral and Written Language</td>
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Note: The table continues with more criteria and ratings.
Knowledge Components:
A. Foundation Concepts about Oral & Written Language
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   - Handwriting, Spelling & Written Expression
Criteria for Evaluating IDA Standards Across Courses

0 = No mention in course syllabus; no relevant or current assigned readings.
1 = One type of evidence of standard (syllabus, activity, lecture, reading, graded assessment, graded assignment)
2 = Two types of evidence of standard (syllabus, activity, lecture, reading, graded assessment, graded assignment)
3 = Three types of evidence of standard (syllabus, activity, lecture, reading, graded assessment, graded assignment)
Selected Standards for Adolescent to Young Adult Education majors:

- Understand the definition of dyslexia
- Receive training in recent dyslexia laws and other relevant federal and state legislation.
- Understand how to identify signs that an individual might have dyslexia
- Recognize that dyslexia may coexist with other cognitive and behavioral problems such as Attention Deficit Hyperactivity Disorder (ADHD) and Anxiety
- Understand the process and urgency of referring struggling readers for appropriate evaluation and intervention
Selected Standards for Adolescent to Young Adult Education majors (cont.):

- Be able to assess word attack skills, reading comprehension, and written expression and explain the implications for appropriate classroom instruction.
- Be able to integrate systematic explicit vocabulary (morphology) instruction into their content area courses.
- Know how to provide individuals with dyslexia appropriate accommodations in their classrooms.
Option 2: Stand Alone Phonics Course

Overview: Framing the Issue

Institutions of Higher Education (IHEs) need to provide the training and understanding of dyslexia and effective methods of instruction for individuals with dyslexia. Instructors need to be skilled and knowledgeable in regarding dyslexia, its origin, and the characteristics of appropriate instruction.
Stand Alone Phonics Course:
Framing the Issue (cont.)

- Teachers know and recognize the usefulness of the fact that assessment, prevention, and remediation for students with dyslexia is a critical factor in raising reading proficiency rates throughout the state.

- Teachers know and recognize the usefulness of the fact that systematic, explicit multisensory reading instruction is needed to ameliorate reading failure.
Stand Alone Phonics Course:
Framing the Issue (cont.)

- Training in effective methods of instruction for individuals with dyslexia must be provided by certified dyslexia teachers in all Ohio school districts.

- Early and Middle Education majors at all universities/colleges in Ohio must receive training in effective methods of instruction for individuals with dyslexia as part of their teacher preparation program.
Phonics Course Description Summary

This course addresses the intense, systematic, explicit teaching of reading, spelling and writing through the use of multisensory strategies. It provides the scientific definition of dyslexia and its common characteristics, as adopted by the International Dyslexia Association (IDA), and the most effective research-based methodologies to address the instructional needs of individuals with dyslexia and other at-risk individuals.
Stand Alone Phonics Course

The full course and other resources are available on OBR website:

- Full Course Description
- Course Objectives
- Scope & Sequence for Systematic Explicit Phonics Instruction in Reading and Written Language
- Helpful References
- Addendum
- Useful materials
Option 3: IDA Knowledge & Practice Exam

Exam will test mastery of the IDA Knowledge and Practice Standards
  - Exam will be an option for all pre-service teacher candidates

IDA is working with Quest Star on the development of the exam
  - Expected availability, spring, 2014

Two Levels of Examination will be available
  - Basic level of the IDA KPS Exam is recommended for pre-service teachers
  - Advanced level of the IDA KPS Exam is recommended for those pursuing a reading or literacy specialist endorsement or graduates of dyslexia certificate programs
Knowledge Components:
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Guidelines for Post Graduate Dyslexia Certificate Programs

- Optional post graduate level program
- Aligned with IDA standards and approval process
- Targets dyslexics and other at-risk students
- Institution based
- Not to exceed 21 semester hours
- IDA certification exam that tests the mastery of the IDA Knowledge and Practice Standards (advanced level/reading specialist)
OBR Implementation of Dyslexia Task Force Pre-service Teacher Training Recommendations

- Program Review Options
- Timeline
- Accountability
- Guidance
Dyslexia Program Review Options

- IHEs will be required to implement one of three options as part of their program review process:
  1. Criteria for evaluating IDA KPS across courses (course rating tools)
  2. Stand alone phonics course
  3. Competency Exam (in development; available spring, 2014)
Implementation Timeline

Winter/Fall, 2013

– Pilot implementation in the OBR program review process for Colleges and Universities
– Feedback

Spring, 2014

– Colleges and Universities will be required to choose one pre-service teacher training option to include in the program review process
Accountability and Guidance

Winter/Spring, 2013

- All guidance documents will be posted on the OBR website at: https://www.ohiohighered.org/education-programs/standards-requirements
- Information will be included in OBR program review documents

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Questions?