

# Understanding Dyslexia

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## Lesson Objectives

- Increase participants' basic understanding of reading differences in both youth and adults.
- Increase participants' understanding of the social and emotional effects of literacy problems.
- Simulate what someone with dyslexia may see when reading.

## Intended Audiences

Family and Community Education groups, K-State Research and Extension faculty and volunteers, teachers, parents of preschool and elementary children, volunteers with church groups who work with youth, adult and youth organizational leaders and members, and other volunteers who work with youth.

## Definitions and Pronunciation Help

**Dyslexia:** (dis lex ē a) A general term for disorders that involve difficulty in learning to read or interpret words, letters, and other symbols, but that do not affect general intelligence.

**Dysgraphia:** (dis graf ē a) The condition of impaired letter writing by hand and sometimes spelling.

**Dyscalculia:** (dis cal que lē a) The condition that affects the brain's ability to make sense of numbers.

## Additional Background

The purpose of this lesson is to educate participants about dyslexia and its characteristics. You may find that very few participants are familiar with the facts about dyslexia. Most participants will be interested and surprised at the information in the fact sheet. There will be times you will encounter those who don't believe dyslexia exists. As the lesson leader, be confident that everyone who works with children will benefit from this lesson, regardless of any preconceived notions. Children with dyslexia will grow up to be adults with dyslexia, so it's important for everyone to understand how reading difficulties will continue to be challenging into adulthood.

A lot of kids who struggle with dyslexia also struggle with dysgraphia. Dysgraphia can be debilitating for a child who has to write or create anything on paper. This is especially true when it comes time to fill out record books and award applications. Although the option is available to type the application, some parents, leaders, or local offices will encourage members to handwrite their record books for the first few years. Typically, kids with dysgraphia have extremely messy handwriting, despite trying their best. It is critical that judges not comment on the "messy handwriting."

Youth who struggle with dysgraphia will also have a hard time making posters and educational displays. (They simply don't possess the fine motor skills needed to accomplish projects like this until they are older.) When neatness is a factor, kids who are dysgraphic will have trouble getting it "neat enough" for a judge's approval. The parents, in turn, struggle with how much help they should provide without actually doing most of it for the child.

Reading for any kind of presentation or working on record books/award applications will always be difficult but not impossible. Youth leaders may encourage members to do a presentation, or hand in an award application, but must understand that when the child is hesitant to participate, there might be an underlying reason.

On the other hand, learning by doing is best for children with dyslexia, so rewarding the effort and the end product is important. Youth with dyslexia may truly enjoy group activities, project meetings, and as much hands-on learning as is available. If they can see it, they can do it. Leaders should keep this in mind when planning meetings.

## Program Preparation

1. Review the fact sheet for *Understanding Dyslexia* (MF2987) and this leader's guide, before planning your program.
2. Have a copy of the fact sheet available for each participant. Have simulations available as handouts or as slide to display.

3. Review the websites listed and use alternative resources for videos or other information you feel might add to the presentation.
4. Hand out the pre/post evaluations. Before the lesson, have participants complete the pre-evaluation. When the lesson concludes, have participants fill out the post-evaluation.

- legal documents
- email, text messages
- general mail
- letters from family
- legal notices
- street signs
- menus

## Suggested Program Presentation Guide

- Give participants a copy of the pre-evaluation to fill out before presenting any part of the lesson. After the lesson concludes, have the participants fill out the post-evaluation so you can determine what was learned.
- There are two dyslexia simulation activities in the leader’s guide that you can use with your audience. Additional simulations are available from the author, [acollins@ksu.edu](mailto:acollins@ksu.edu). Please be aware these simulations are designed to be examples of what dyslexics may see when reading.
- Included in this leader’s guide is a “Checklist for Possible Dyslexia.” This can be used at any time during the lesson or as a handout after the lesson.

## Present the Lesson

Have a white board or easel pad at the front of the room. Read the paragraph below and ask how many daily activities your group can think of that require reading. Write those on the board and save for later in the lesson.

### Begin lesson by reading the following paragraph:

Reading is something we all do every day. Some of us read for the enjoyment we get out of it. Some of us read to study and learn. Some read to relax and unwind. But have you ever thought about what we have to read out of necessity? Reading is so integral to everyday life that we can’t get through the day without it. Let’s think about some of our daily activities that require reading — how many can you name? (The activities listed are the “biggies” but you may list other activities the participants suggest.)

- prescriptions
- recipes
- food labels
- newspapers
- directions on food packages

Those who read fluently think nothing of reading to get through the day. With that in mind, can you imagine how difficult life would be if you struggled to read?

Present fact sheet information and simulations on page 3 of the leader’s guide at this time.

## Lesson Conclusion

After discussing the fact sheet, return to the list made at the beginning of the meeting. Circle anything on the list that has a direct correlation to issues a person must cope with even as an adult. The goal is to raise awareness that children with dyslexia and reading problems will grow up to be adults with dyslexia, so it’s important to understand how reading difficulties will continue to be challenging into adulthood.

The more people understand about childhood and adult literacy problems the more society can accommodate those differences.

## References

- Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at any Level*, Sally Shaywitz, M.D.
- How Your Child Is Smart: A Life-Changing Approach to Learning*, Dawna Markova, PH.D. with Anne R. Powell
- Basic Facts About Dyslexia and Other Reading Problems*, Louisa Cook Moats, Karen E. Dakin
- Teaching Students with Dyslexia and Dysgraphia: Lessons from Teaching and Science*, Virginia W. Berninger and Beverly J. Wolf
- Driven to Distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood through Adulthood*, by Edward M. Hallowell, M.D. and John J. Ratey, M.D.
- From ABC to ADHD — What Parents Should Know About Dyslexia and Attention Problems*, by Eric Q. Tridas
- One Word at a Time: A Road Map for Navigating Through Dyslexia and Other Learning Disabilities*, by Linda G. Tessler Ph.D.
- The International Dyslexia Association, Fact Sheets: Dyslexia Basics, Understanding Social and Emotional Problems Related to Dyslexia, [www.interdys.org](http://www.interdys.org)
- FUNdamental Learning Center, 917 S. Glendale, Wichita, KS 67218; (316) 684-7323, [www.funlearn.org](http://www.funlearn.org)

Children of the Code: A Social Education Project,  
[www.childrenofthecode.org](http://www.childrenofthecode.org)

National Network of Libraries of Medicine, Health Literacy,  
<http://nnlm.gov/outreach/consumer/blthlit.html>

Report Healthy People 2010; [www.healthypeople.gov/Document/pdf/uib/2010uib.pdf](http://www.healthypeople.gov/Document/pdf/uib/2010uib.pdf)

Center for Health Care Strategies, Inc. (Fact Sheets 2, 3, 4 and 5),  
[www.chcs.org](http://www.chcs.org)

NAAL, National Assessment of Adult Literacy, [www.nces.ed.gov/naal/factsheets.asp](http://www.nces.ed.gov/naal/factsheets.asp)

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## Simulation 1

Pass out a copy to each participant, or show on a screen. Have a volunteer read the passage out loud.

What a person with dyslexia may see when trying to read this passage:

**The gift of dyslexia is the ability to think multi-dimensionally. While the ability to see in pictures and to change one's point of focus or reference point is a handicap in reading, it can also be a source of creativity and brilliance.**

Ask:

Were any mistakes made when reading?

What is it that makes this passage look so strange?

- Letters e, c and o are interchanged or reversed.
- Letters b, d, p, q are interchanged or reversed.

Isn't it interesting how seven letters from a 26 letter alphabet can make these words look so strange?

It's now easy to see how e, c, and o are so similar in shape, it would be easy to confuse them. Many of us have probably never thought of that before.

Also, when we say the letters b, d, p out loud, they all sound alike, or rhyme. So not only do they have the same shape and can be easy to reverse, they now also sound alike. Can you imagine trying to guess at these letters if every time you looked at them, they were turned another direction or had a different sound?

### How the passage reads to most people:

The gift of dyslexia is the ability to think multi-dimensionally. While the ability to see in pictures and to change one's point of focus or reference point is a handicap in reading, it can also be a source of creativity and brilliance.

## Simulation 2

Pass out a copy to each participant, or show on a screen. Have a volunteer read the passage out loud.

What a person with dyslexia may see when reading this sentence:

**Ydelsxcis rposse nfimoartoin cmuh tasfre anth sreoth.**

**How the sentence reads to most people:** Dyslexics process information much faster than others.

This is another example of how a person with dyslexia may look at words and see something other than what is there. Some people with dyslexia report that the letters in a word are jumbled — not reversed, just mixed up.

It's not unlike doing a word puzzle every time you try to read.

## Checklist for Possible Dyslexia

Does he/she:

- Have trouble keeping his attention focused on one thing?
  - Have trouble controlling a crayon or scissors?
  - Have difficulty jumping rope, skipping, swimming or doing other things that require repeated rhythmic movements?
  - Reverse words, reading "was" as "went" or "house" as "horse"?
  - Have trouble finishing tests in the allotted time period?
  - Have difficulties singing a tune?
  - Seem slow in sports or athletic ability?
  - Reverse numbers?
  - Have to hold a book out farther than a normal 14 inches order to read?
  - Often seem to confuse left and right?
  - Is/was child late or irregular in speech development?
  - Is he/she clumsy?
  - Does the child confuse concepts such as up/down, before/after, yesterday and tomorrow?
  - Is his/her handwriting difficult to understand? Do the letters look different each time they are written?
  - Is poor spelling an issue?
- Is reading aloud difficult?
  - Are word problems difficult for him/her, the ones that begin, "If Johnny had six apples . . . ?"
  - Are reading skills far behind peers for no explainable reason?
  - Have other family members been poor readers?
  - Is he/she immature compared to peers?
  - Did or does he/she have problems learning to tie a shoe?
  - Did or does he/she have trouble remembering names for colors, numbers, friends, family?
  - Are there general problems with organization and managing simple tasks?
  - Is there a serious difficulty in learning and remembering any kind of printed word or symbol?
  - Were there reversals in speech during infancy?
  - Do his/her language difficulties persist?

For young children — any 8 may indicate concern.

For older children — any 12 may indicate concern.

Adapted from: "Diagnosing and Treating Dyslexia," Dan Kaercher; *Health* magazine, "Symptoms indicating Dyslexia," Charles Dar, a national expert on the subject; and Fundamental Learning Center, Inc. 917 S. Glendale, Wichita, KS, [http://www.funlearn.org/?page\\_id=252](http://www.funlearn.org/?page_id=252)

## Dyslexia — What I Know, What I Have Learned

### Pre-Evaluation

What is your impression of dyslexia, what do you think it means?

Is dyslexia an indicator of intelligence? Yes or No

Is dyslexia a vision problem? Yes or No

Do you know anyone in your life who you think struggles with dyslexia?

Does dyslexia affect other life experiences outside of the school environment? Yes or No

### Post-Evaluation

Name one thing you learned about dyslexia today.

Is dyslexia an indicator of intelligence? Yes or No

Is dyslexia a vision problem? Yes or No

Name one fact that surprised you the most about dyslexia.

List other areas in life that someone with dyslexia may struggle with outside of a school environment.

Please return this evaluation to your instructor.

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