Q: Learning Disorders

MODULE Q: UNDERSTANDING LEARNING DISORDERS[1]

IN THIS MODULE:

The National Institutes of Health defines learning disorders as "disorders that affect the ability to understand or use spoken or written language, do mathematical calculations, coordinate movements, or direct attention." As a practical matter, a person with a learning disorder does not have an intellectual disability or difficulty understanding or retaining ideas once they have been received. Unless you interact with a child in a school or learning setting, you rarely notice the disorder. The struggles show up in Scouting settings when we teach information. Learning disorders can vary widely in how they present themselves and how severe they are. A person can have a learning disorder that is significant enough to present difficulty but not severe enough to qualify for special education services at school. Learning disorders can appear by themselves, but it not unusual for them to overlap with other conditions. These disorders are life-long conditions.

People who have learning disabilities are often very bright. Their overall level of day to day functioning is not affected. What is affected is receiving, sending, and organizing information. This mismatch has a social impact and **such Scouts may go to extremes to hide their struggles from others and avoid embarrassing themselves**. When forced into situations where they feel weak due to their disability, they may be stressed and may misbehave to distract others and escape the task. Being bright, these Scouts will invent workarounds to accomplish what they need to without relying on their weaker skills, such as a Scout with writing difficulties who will use voice-to-text on the phone. Sometimes, you never notice these difficulties because the scout has become so adept at avoiding the area of weakness without adult intervention.

DYSLEXIA

Dyslexia is the most common learning disability. It affects somebody's ability to take in information from the written word. More specifically, it is difficulty in decoding words for what they are and seeing letters in the original sequences or orientations. Several letters in English are mirror images of one another (b-d, p-q, w-m, u-n, z-s) or near misses (c-o, y-w, i-l, h-b, r-v). Some people with dyslexia also describe letters as flipping or jumping around on the page as they look at it so that the "picture" is not static.[2] When reading a passage, sometimes there are enough decoding problems while trying to read that the overall meaning gets lost. Since you have to be able to see what you are doing while you write, people with dyslexia often struggle to write as well. Words and letters can come out of order. This is not exactly the same as dysgraphia, but it has the same effect of being hard to understand in written communication.

As a practical matter, it is not so important that a Scout leader identify that a Scout is struggling with dyslexia as it is to recognize when a Scout has an exceptionally hard time with reading and writing tasks. Dyslexia is a life-long condition. While special training can allow a person to cope when they must, and using alternative ways to teach can keep a youth from being left behind intellectually, the struggle itself never goes away.

So, what does it look like?

- Scouts with dyslexia will often avoid tasks that involve reading, especially reading out loud.
- You may see them mouthing words when they read silently to themselves.
- Expect the Scout to show stress when asked to read aloud in a group, and don't be surprised if he or she tries to escape the room rather than attempt to read aloud when asked.

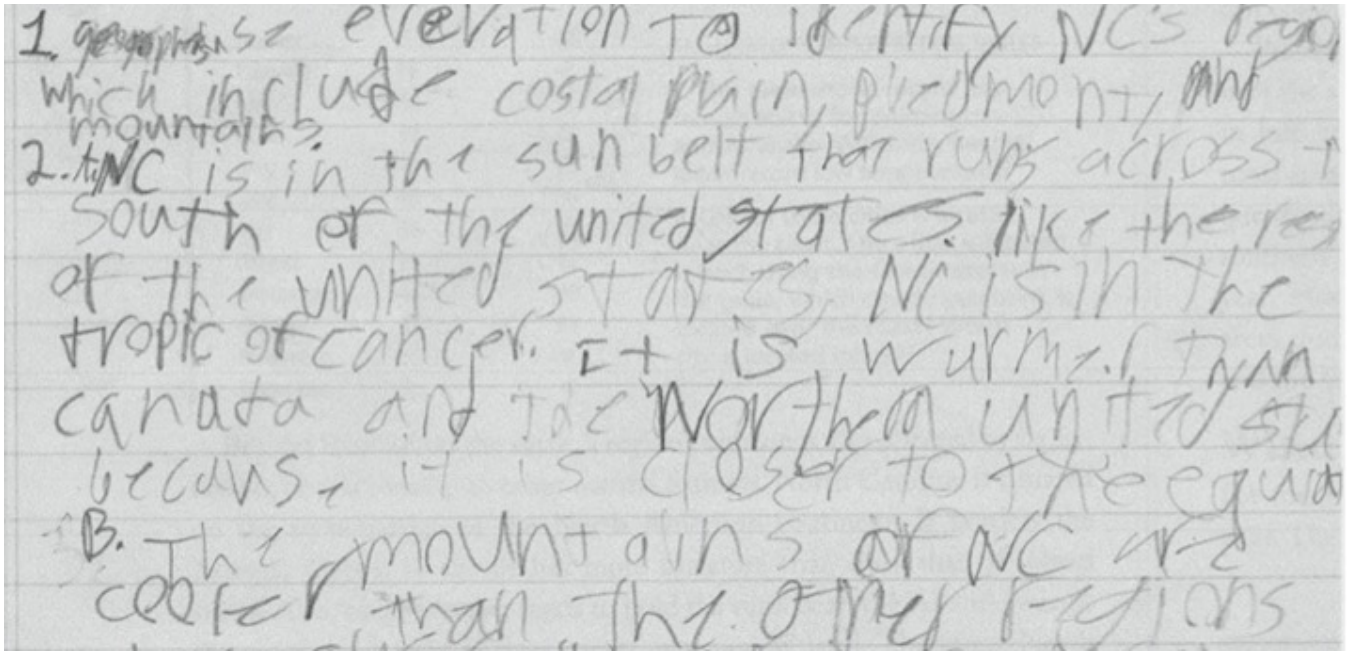
Helping Scouts with dyslexia is as simple as supplying all your Scouts with multiple ways the access the information needed to reach advancement.

- The Scout handbook can be found in audio format through the Bookshare program (bookshare.org).
- There are accessibility features in smartphones that will read aloud the text on the screen.
- Consider using other kinds of visual aids besides text when you are teaching.
- If a Scout has to make a presentation, using a poster or a role play may allow him to be more effective.
- Text from a computer can be printed in larger dyslexia-friendly fonts[3] that have been shown to make reading easier.
- A buddy can help when reading tasks are unavoidable and can function as a scribe when the Scout in question has a hard time writing.
- Given the growing abundance of voice-to-text and text-to-voice technology, it may be appropriate to let a Scout bring electronics on outings rather than having a strict "no electronics" policy.

DYSGRAPHIA

Dysgraphia is a difficulty in writing, that is, putting information in written form. Often a person with dysgraphia is smart and can speak articulately, but avoids tasks involving writing or drawing. The effects are more obvious with hand-written documents. The writing will look like it came from a much younger person, with reversed letters, and uneven letter sizes. Typewritten text will have many misspellings, missing punctuation and capitalization. If they use auto-correct for spelling in the word processor, incorrect words get substituted.

Also, a person with dysgraphia will be able to frame thoughts and ideas when speaking but will have a much more difficult time constructing coherent ideas in written form. Also, the act of writing is physically exhausting. The struggles with writing by hand may also show up with other tasks that need fine motor control like tying knots and doing craft projects.



An example of handwriting from a dysgraphic student[4]

To help scouts with this disability:

- Be as flexible as possible with what you accept as written information.
- When possible allow groups to work to together on writing tasks
- Use a scribe to assist with writing.
- Allow extra time for a writing task by allowing the scout to start the task before the meeting.
- Allow extra time for fine motor activities
- Change the scale (size) of the task to turn a fine motor activity into a gross motor activity.
- Review important paperwork before it is turned in for rank advancement and allow the scout to make corrections as necessary.

DYSCALCULIA

Dyscalculia[5] affects a Scout's ability to complete any tasks that involve numbers and calculations. This can include:

- Telling time
- Converting word problems into math
- Dividing up expenses and food buying for outings
- Expanding recipes and figuring out how much of each ingredient is needed
- Totaling up mileage for segments of a trip
- Using scale and proportion with maps
- Personal budgeting and money management

It is not unusual for someone with dyscalculia to also struggle with short-term memory tasks like remembering a list or a sequence of instructions. Like with dyslexia, a youth may try to manipulate the situation to avoid having to do math tasks, like avoiding games that rely on counting.

As with the other "dys" learning difficulties, you can use more than one approach to providing information. For example:

- Use written words or spoken directions to substitute for manipulating numbers
- Use objects or tally marks to count with

- Use diagrams and charts to express math ideas
- Use physical or "pretend" money to discuss ideas
- Allow and encourage the Scout to use calculator and mapping apps to augment his or her abilities and do tasks independently

(CENTRAL) AUDITORY PROCESSING DISORDER

The "dys" learning struggles just discussed related to decoding written symbols. There is a counterpart for spoken language called central auditory processing disorder or just auditory processing disorder. It is far more common than most people know and many of those who struggle with it may not know it. In this disorder, a person struggles to distinguish between similar sounds in speech and in connecting the sounds to the words being said. While the effect on a person's life is similar to being hard of hearing, the difference is that the ears work fine, but the brain struggles to decode the signal. Background noise makes it harder. Simply speaking louder or amplifying sound is not a solution.

Scouts with this struggle may not appear to be "getting it" like others are when you are giving a verbal lesson. Watch for Scouts that asks "What?" a lot, or seem to ignore others who are speaking to them. Another sign is hesitation when a group task begins, as though the Scout is unsure what he or she should be doing. As a social effect, don't be surprised if these Scouts do things to avoid being put on the spot. They may spend time by themselves off to the side, whittling or reading a book. When work is being divided up, they may volunteer for tasks that don't take much talking (listening) to others.

So how can you help?

- When you speak to the Scout, face the Scout directly to reduce sound distortion and let the Scout watch your lips while you are speaking.
- Move learning activities outdoors, or away from other activities, to reduce background noise.
- Use visual aids and written instructions when you can. Don't forget you can draw in the dirt.
- Encourage the Scout to sit close to the speaker.
- Ask the Scout to repeat back what was said, if you aren't sure he or she understood
- Teach in a smaller group
- Try changing how you speak – go slower?, pause a bit between phrases and sentences?, use a higher or lower pitch?, emphasize key words?
- Give instructions to the Scout and the Scout's "buddy" at the same time, so the buddy can help repeat instructions if needed.
- Encourage the Scout to speak in front of others. Ask for the Scout's ideas.

EXECUTIVE FUNCTIONING ISSUES

Executive functioning is a term that describes all of the skills needed to organize and complete tasks. As a practical matter, younger kids in general are gradually learning "executive functioning" and are not especially good at it. It may not become clear that a person is truly challenged in this regard until they are out-of-step with their age peers.

While executive functioning issues do not fit some definitions of a learning disorder, these struggles do impact the process of learning, completing school work, and completing Scout advancement tasks. People with attention deficit/hyperactivity (Module K) and autism (Module L) typically struggle with executive functioning, but they are not alone.

The particular challenges of executive functioning include:

- Following long sequences of instructions

- Setting goals
- Breaking down a larger task into the steps needed to complete it
- Putting steps into the right sequence to be productive
- Understanding where decision points will be (flowcharting)
- Budgeting time and money
- Staying focused and on task till a step is completed
- Keeping up with details

Those who struggle with executive functioning tend to have some other behaviors as well. These include:

- Rigid attitude about routines, irritability regarding changes in routine
- Routines and habits that appear compulsive
- Difficulty shifting from one task to another when appropriate
- Messy living and work spaces

So how can you help?

- Take time to talk the Scout through planning tasks
- Allow a Scout time to finish the step he or she is working on before changing tasks or activities
- Give advance notice when you expect a change from routine
- Maintain the routines that do not get in the way
- Keep sequences of instructions short and be willing to check in frequently
- Break general instructions into smaller steps when giving instructions
- Avoid throwing off sleep/wake times
- Watch for when a Scout is idle while others are at work. Then redirect or re-instruct.

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[1] The Boy Scouts of America would like to thank the Learning Disability Association of America (ldaamerica.org) for reviewing the contents of this module for accuracy and usefulness.

[2] While this is reported, there is not research to support this as a characteristic of dyslexia. Dyslexia is not a visual disorder as many believe. It is a disorder related to phonological (sounds in a language) and orthographic (sound to symbol mapping) processes.

[3] In this module, the editors have attempted to format the text in dyslexic-friendly ways. The color of the text is not pure black. A san-serif font was used. The text is left justified. A single space is used after periods. Bold text is used for emphasis rather than italics. The font size was increased to 14 point.

[4] https://www.dyslexicadvantage.org/wp-content/uploads/2016/08/Screen-Shot-2016-08-23-at-11.06.58-AM.jpg#prettyPhoto

[5] If you have never heard it spoken out loud, the pronunciation is dis-kal-kyul-ya.