

# Dyslexic Advantage

## PREMIUM MAGAZINE

### STRATEGIC LEARNING FOR READING



Icon by Ghosantosadrive  
Flaticon

- POLYMATH INVENTOR  
JAMES LOVELOCK
- THE ACCESSIBLE CLASSROOM
- DYSLEXIA & MATH
- DYSLEXIC COGNITION:  
GETTING STARTED



**Dyslexic Advantage** is a 501(c)3 non-profit organization and one of the world's largest online communities for dyslexia.

Our mission is to transform the way dyslexic people are understood, educated, and employed by identifying and using strengths that are the core features of the Dyslexic Mind.

Dear Friends,

Highlights this issue - Strategic Learning for Reading, James Lovelock, and Getting Started on Work. We have a few hardcover crates of The Dyslexic Advantage left. They are a great price for a crate of 28. \$130 including shipping! Purchase **HERE**. Great for parent groups, schools, and newly identified!

Fernette

Link for this issue on Joomag: <https://joom.ag/7Wed>  
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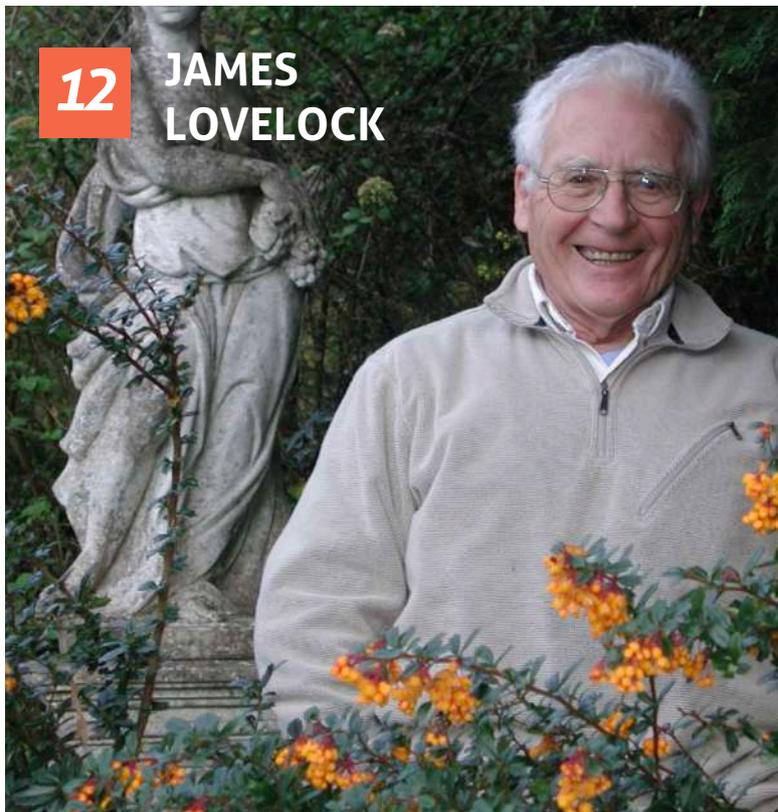
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# STRATEGIC LEARNING FOR READING

Teaching and parenting dyslexic students are arts as well as science. To be strategic in your instruction, the long-term goals are as important to keep in mind as step-by-step instruction.

## HOW DO YOU CORRECT STUDENTS WHEN READING ERRORS HAPPEN?



While correction is important, it's also important not to overwhelm students when their first attempts at reading wildly miss the mark. Students who do not know how to decode may make wild guesses - and need years of structured multisensory instruction to reach their goals of fluent reading.

With this in mind, some sensitivity to where a student is and whether you're reading together for enjoyment or providing instruction in decoding may help you choose whether or not to overlook small errors that do not affect meaning.

Some students struggle mightily with anxiety and shame, and positive reinforcement, comments about progress, and helpful supports when needed will have positive effects on reading over time.

## READING: FIND THE RIGHT LEVEL

First, to avoid student frustration, it's important to find the right level for students reading aloud.

## QUICK ASSESSMENT OF A STUDENT'S READING LEVEL

There are many ways to assess a reading level online. Most curricula have tests that can help you determine reading placement and below you'll find a link to the San Diego Quick Assessment.

### San Diego Quick Assessment

(a word identification test)

#### Directions

Fold the following pages in half length-wise so your student(s) only sees one list at a time and won't get overwhelmed, or cut the pages in half. Show him one list at a time starting with 2 or 3 lists below his grade level. (Or begin with Pre-Primer for K students.) Ask him to read the words if he can.

Mark a check for every word he pronounces correctly without your help. If he corrects himself after about 5 seconds or less, score it as correct. If he pauses for longer than 8 seconds before reading the word, say, "Please try the next one." Stop the test when he misses 3 words in a particular level.

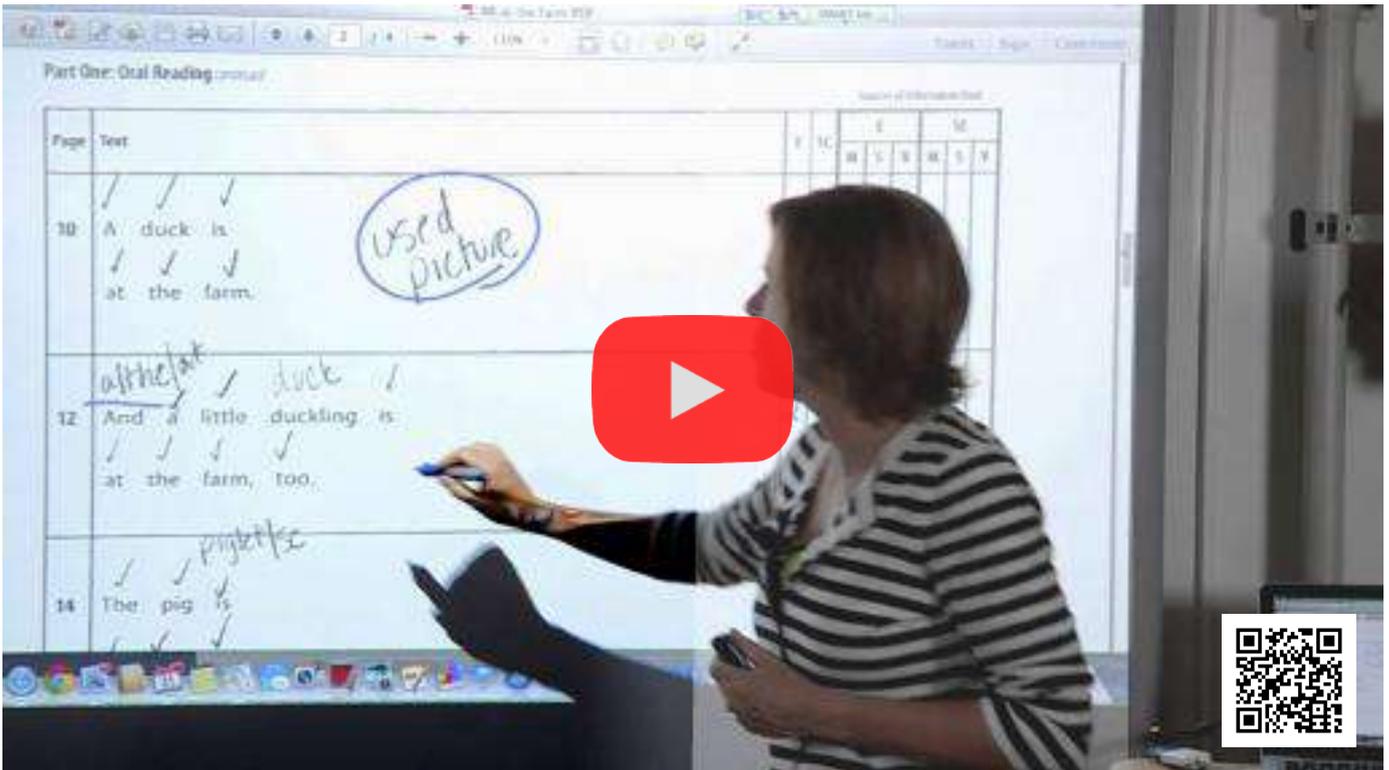
Pre-Primer	✓	Primer	✓	First	✓	Second	✓	Third	✓
see		you		road		our		city	
play		come		live		please		middle	
me		not		thank		myself		moment	
at		with		when		town		frightened	
run		jump		bigger		early		exclaimed	
go		help		how		send		several	
and		is		always		wide		lonely	
look		work		night		believe		drew	
can		are		spring		quietly		since	
here		this		today		carefully		straight	

Fourth	✓	Fifth	✓	Sixth	✓	Seventh	✓
decided		scanty		bridge		amber	
served		business		commercial		dominion	
amazed		develop		abolish		sundry	
silent		considered		trucker		capillary	
wrecked		discussed		apparatus		impetuous	
improved		behaved		elementary		blight	
certainly		splendid		comment		wrest	
entered		acquainted		necessity		enumerate	
realized		escaped		gallery		daunted	
interrupted		grim		relativity		condescend	

Eighth	✓	Ninth	✓	Tenth	✓	Eleventh	✓
capacious		conscientious		zany		galore	
limitation		isolation		jerkin		rotunda	
pretext		molecule		nausea		capitalism	
intrigue		ritual		gratuitous		prevaricate	
delusion		momentous		linear		visible	
immaculate		vulnerable		inept		exonerate	
ascent		kinship		legality		superannuate	
acid		conservatism		aspen		luxuriate	
binocular		jaunty		amnesty		piebald	
embankment		inventive		barometer		crunch	

## STRATEGIC LEARNING

Briefly, running records are a way of assessing how a child reads aloud. A nice overview as well as examples how to mark a student's progress can be seen in the video below.



Some educators debate whether running records are the most efficient way for students to show progress with fluency - but if done properly, it can provide an insight into how students are approaching words they don't know.

Where running records fall short is when they are used exclusively without any substantial decoding / structured literacy work.

### THE NEED FOR DECODING WORK

The first thing reading errors may tell you is that students need decoding work. Decoding is the skill of learning how words can be broken down into sounds and letter groups. Readers who substitute in words that "make sense" but have no resemblance to the target word, may have severe difficulties in decoding.

For those who want to look more in the analysis of reading errors, a nice PDF is available [HERE](#) from the UK (some different spelling from the US).

As an example, when one reader substituted "reading" for "ready", "hadn't" for "hated" and "clean" for "clear", it's a sign that working on suffixes is a good idea (for example, see this [suffix post](#) at All About Learning).

In the following case, when a student showed errors such as "camera" instead of "cinema", "the" for "to", "plans" "planes", and "arches" for "horses", the problems are more widespread. This student needs to start at the beginning with a



### **WORD SUBSTITUTIONS MAY EVOLVE OVER TIME SO BE VIGILANT**

Earliest readers may have wilder guesses, but over time, the substitutions may become more subtle - and yet they can still tell you that the reader is not actually decoding or sounding out the word, but making a guess on the basis of its visual similarity or what might make sense on the basis of context. Often gifted dyslexic students can become especially adept at figuring out meaning although their single word decoding is quite poor.



These frequent letter sequencing mistakes would not occur if students had stronger phonological awareness; as a result, some educators may prefer focusing on the step-by-step structured literacy programs instead of adopting visual strategies, but I don't think these approaches have to be mutually exclusive. Dyslexic students can also struggle a great deal unlearning mistakes, so it is also better if they can avoid making them, having an efficient way to look up correct spellings and meanings when the needs arise. More accurate spelling and writing will also result in more accurate reading.

Of course, taking certain words and doing more concentrated phonological studies of them when problems arise - can also be done, but good structured literacy programs often have an incremental level-upon-level structure to them that will be easier for students to master than studying errors out of sequence.

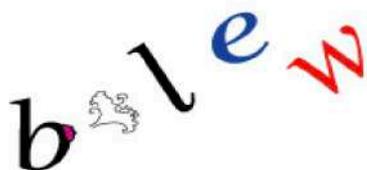
Because some dyslexic children and adults can't make a picture in their minds of the spelling of words, it is much more difficult for them learning the correct spellings and fluently reading new sight words.

### FIGURE OUT YOUR STUDENT'S MEMORY STRENGTHS

Some people recall better with doodles and pictures, while others prefer verbal mnemonics. Color can also go both ways (be helpful or too distracting), so experiment and then funnel learning toward the strongest memory paths.

For example, to distinguish the homonyms blew and blue:

blow lightly, east wind!




blue letters use eel ink

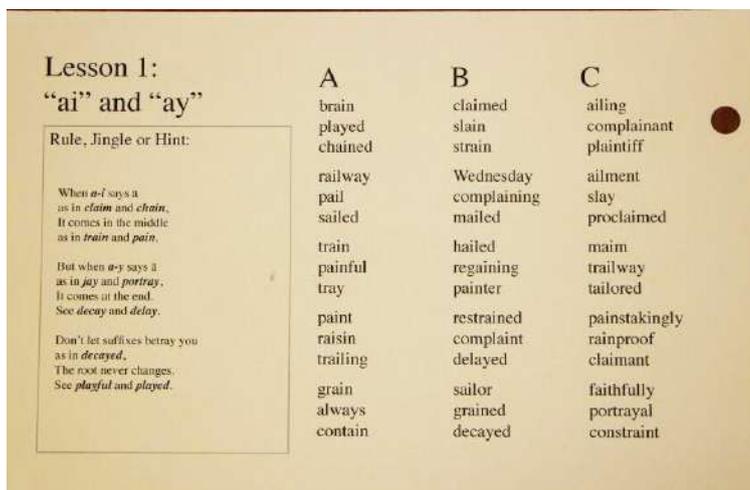
## STRATEGIC LEARNING

Ask your student which presentation is more memorable? Do they remember the verbal jingle or the colored "ew" in blew or the e and the w blowing away? If one way of presenting information is much stronger than the other, then try to apply that method (verbal mnemonic, color, or pictures) to other tasks.

Sometimes strong auditory learners can remember sight words by simply developing a practice of reciting their spelling words out loud. This letter-by-letter approach to words can be used to retrieve words while reading or writing and spelling.

A slightly different approach is taken by [Phonetic Zoo](#). We've sometimes seen this program as an add-on for older students who need more help in spelling...but it can also double-duty to help students recognize sight words. The nice thing about this program is that it's not too babyish for older learners.

Students listen to words and how they are spelled and how they are used in a sentence, practice spelling them, crossing out incorrectly spelled words, then spelling them the correct ways. There are memory supports with jingles and animal pictures.



Photos from [Every Bed of Roses](#) blog

## STRATEGIC VS. NON-STRATEGIC LEARNING?

In business, strategic leaders are known for analyzing their companies and their teams (including themselves), thinking ahead, planning for unexpected contingencies, and implementing informed plans. For example, business strategists often implement SWOT analysis that stands for Strengths, Weaknesses, Opportunities, and Threats. This can be applied in all types of life situations, including education. To learn more about SWOT in education, visit this link at [HelpfulProfessor](#).

So one key difference between strategic and non-strategic learning is always whether education will flexibly adjust depending on ultimate educational goals. . What is it that the student wants out of education? Is this changing over time? What are the pros and cons of various choices or decisions?

What are a student's strengths and weaknesses? What are opportunities and threats about various plans? It is possible to be successful without a strategic approach to education, but by ignoring individual factors in education, students can miss out on opportunities to really distinguish themselves.

The decisions regarding remediation and proportion of strength-based vs. remediative activities may become more nuanced as students get older. More mature students may crave more extracurricular time and more time to develop interests, and that might very well be more important than improving reading fluency and spelling. Decisions need to be personalized.

Some 5-15% of dyslexic students may also struggle to be remediated in the most popular structured literacy programs - and if so, it may make more sense for them to become masters at technology and all the supports they can obtain.

When should a student stop remediation? The answer might vary for different individuals. If a student is making progress, then staying in until silent reading comprehension is on par with peers is a reasonable goal. The amount of time in tutoring or extra support may be greatest in the elementary years. Writing and organization may require more attention than reading in middle school and beyond. I'll talk more about strategic writing instruction next month.

# JAMES LOVELOCK: INVENTOR, POLYMATH, CLIMATE PIONEER 1919-2022



James Lovelock [Wikimedia \(Bruno Comby\)](#)

"I had this profound drawback which has hampered me all my life, of being dyslexic. And therefore, having problem with equations, I can never tell which side I'm on, and waste an awful lot of time checking."  
- James Lovelock

The world said goodbye to Dr. James Lovelock, who passed away at the age of 103. He led an impactful life in science, but perhaps is best remembered for environmental concerns and his Gaia theory which called for the world to recognize that people and other living organisms interact with their inorganic surroundings to form a synergistic and self-regulating system, and to recognize dangers that might affect that relationship. He's been called the father of ecology.

With such a tremendous impact, Lovelock is being lauded and remembered around the world (for instance [NPR](#), [Forbes](#)). The [Guardian's](#) Environmental Editor said this about his chance to meet and talk with James:

"It was thrilling to talk to one of the greatest minds Britain has ever produced. Here was a man who helped to shape many of the most important scientific events of the 20th century – NASA's search for life on Mars, growing awareness of the climate risks posed by fossil fuels, the debate over ozone-depleting chemicals in the stratosphere and the dangers of industrial pollution – as well as his work for the **British secret services**."



## DYSLEXIA FOR TEACHERS ONLINE COURSE

### For General Classroom Teachers

- » How Dyslexia Presents
- » What Good Remediation Looks Like
- » Evidence-Based Strategies that Work
- » Ways to Support with Accommodations
- » Gifted, ELL, Social Emotional & more!

### CLOCK HOURS & GRADUATE CREDITS

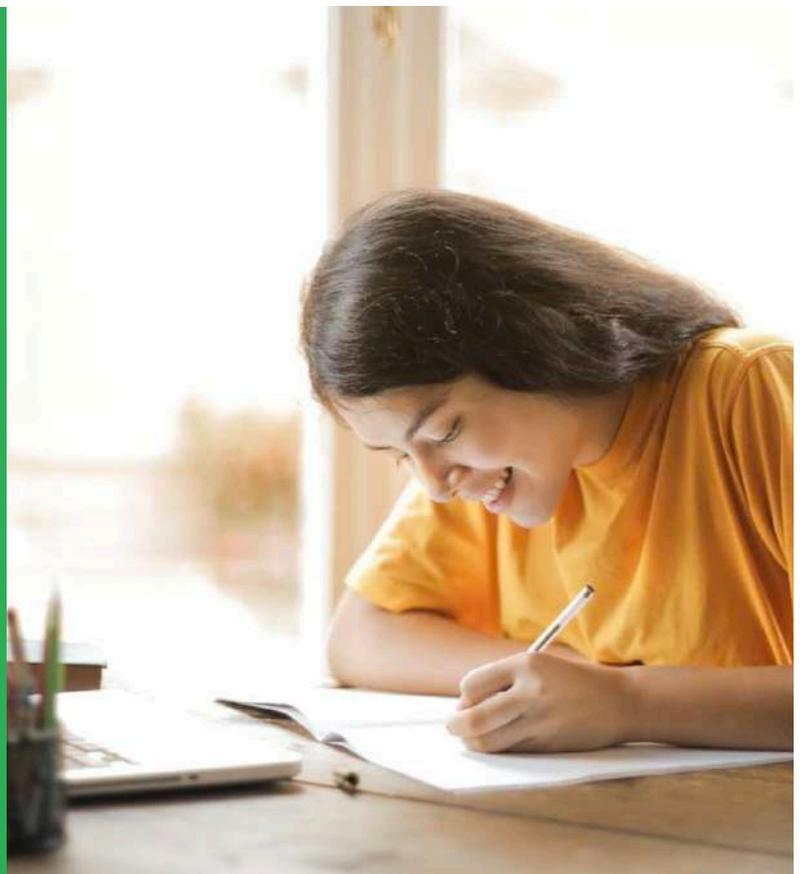


Dyslexic Advantage &  
Seattle Pacific University

## HOMESCHOOLING DYSLEXIA ONLINE

For Homeschooling parents,  
Microschools, and Tutoring  
groups

Includes Premium  
Membership and  
Q & A Forum  
**Reading, Writing,  
Math, Technology**



## INSPIRATION

Thinking about James' passing, I took some time to review more about his life in an [oral history](#) from the British Library.

### CHILDHOOD

James grew up in what he described as a working class family. He was largely raised by his grandparents in his early years because his parents needed to work (they owned an art shop in London), but he credited his weekend walks with his father to his earliest love of nature. James learned to identify different plants and bugs from him and follow animal tracks to burrows. James had a lifelong love of animals that sometimes would conflict with later animal scientific experiments directed by others. His mother had won a scholarship to grammar school, but her parents couldn't afford the rest of tuition, so she never went. Perhaps because of this, James' mother encouraged education for him as a child and approved of his choices of books from the library that were more educational (like Wade's Organic Chemistry) over his other choices, like comic books. Of his father, he says he was functionally illiterate until he attended trade school - but "an intelligent man" who didn't have to "learn his three Rs".

In retrospect, James said his parents raised him with "a special kind of experience that I don't think you can ever get from merely reading..."

James would later recall his early chemistry reading as "loo" or bathroom reading as he imagined what it would be like to create stink bombs and fireworks, but could not afford to make the materials.

James' parents were non-conformists and James himself resisted authority, so he didn't often talk of his early school years and his remembrances of the times were "unhappy."

### EARLY NERDISH TENDENCIES

Because James' parents were both in the art business and they thought he might have some talent, they took him to the Victoria and Albert Museum mechanical room with steam engines and the mining section which had exhibits on explosions. When he lived in London from ages 7-13, he became a regular at the museums.

mechanical room with steam engines and the mining section which had exhibits on explosions. When he lived in London from ages 7-13, he became a regular at the museums.

Nevertheless, James seems to always have a curiosity about how things worked and when money was short (which was common), he would try to invent things to make what he would want to do. At the age of 10 or 12, James sold his stamp collection in order to buy parts to make a short wave radio receiver:

"I remember winding coils on jam jars, and making radio frequency chokes by winding enormous lengths of wire around a pencil, and things like that... I made it all and to my delight it worked and I was able to hear an American radio station."

### GOOD AT THIS, BUT BAD AT THAT

**"I'm dyslexic and hopeless at arithmetic, but nowadays I love maths as computers do all the hard arithmetic chores."**



As is typical for many dyslexics, James seemed to have a "spiky profile". He was very good at some things, but suffered at others. Math was a particular problem, or rather arithmetic.

"The concepts of mathematics I love, in fact, I spend an awful lot of my time building models and doing mathematics...it's just the arithmetic operations that I come unstuck...I can't pass exams in it. (laughs)"

## INSPIRATION

### POLYMATH INVENTOR AND PROBLEM SOLVER

People like James Lovelock are so interesting because their inventions (hundreds and hundreds of them by his account) span many fields and represent critical breakthroughs.

Because money was limited early on both in terms of his household and then later working during wartime and then in small businesses and laboratories, he was accustomed to finding that his equipment fell short and that there was no money to buy something better. As a result, he was an enthusiastic prototyper, curious by nature, and willing to invent new things.

As an example, his first job after getting his chemistry degree was in a photography studio because he wanted to pay his parents back for the investment they made in his education. He quickly found that business paid better than an academic job. He once went with a senior technician to a gelatin company because it seemed that the gelatin wasn't doing its job for photography any more. As they watched the foreman going through the process of making gelatin, they saw a bucket on the ground - and he told them that was for the hydrogen peroxide he threw in. They noticed that the bucket was new - and asked to see the old bucket - and found out that because the bucket was bigger, the foreman had accidentally been diluting the total gelatin volume by half. James would soon discover that he loved real world problem solving.

After working at the photography studio, James got a position studying chemistry at the University of Manchester. He worked at a Quaker farm before his professor recommended him to a Medical Research post to study infection transfer in wartime. James recalled him saying "Oh, we need a young scientist... (who) has got to be a very hands-on type, we don't want an academic kind."

As it turned out, James was a perfect fit. Soon after he arrived, he worked with a team to create a bacterial sampler for use in wartime because so many soldiers were dying of infections. He would run the bacterial sampler and take detailed notes to figure out when bacteria was being spread through the air...

As it turned out, James was a perfect fit. Soon after he arrived, he worked with a team to create a bacterial sampler for use in wartime because so many soldiers were dying of infections. He would run the bacterial sampler and take detailed notes to figure out when bacteria was being spread through the air... like when hair was disturbed. Like the famous epidemiologist Don Francis (we interviewed him and he presented at one of our Dyslexic Advantage conferences), James was also involved in trying to figure out the sources of epidemics. They ended up finding a patient who was a nasal carrier of hemolytic anemia. When the nurses made up the beds, they discovered it was creating clouds of bacteria in the air, infecting nearby patients with wounds.

Wartime also had him figure out problems to help prevent people from being injured by firebombs. When his group was asked to test out materials that might help protect people from fire injury, James thought about rabbits in a wildfire - and then more generally animals like sheep and their wool. He reasoned that they had evolutionarily adapted to protect themselves from the elements - so testing out what might help protect people from fire, he found out that a wool blanket was just about as good as anything.

## LONE SCIENTISTS

It's difficult to boil down James' 103 years to a few page especially as he was so prolific, but dyslexic polymath inventors are not so uncommon in the annals of scientific history.

In one of his interviews with the Guardian, James wrote of the importance of lone scientists who can work on important questions that transcend typical academic disciplines.

"When I look back, I am surprised how often inventions stole into my brain when someone entered my room and asked, 'Can you think of a way to do...?' Lone observers noticed something different and wondered, then patiently waited and checked their observations...the recently devised processes of peer review and the funding of science by grant agencies are both prejudiced against outsiders and loners...there are places for large teams as well as for lone creators. We need them both and we need them now."

## INSPIRATION

A fond look back at the remarkable innovator, James Lovelock:



# THE TRICKY TEEN NUMBERS



Some of the difficulties that dyslexic individuals have learning math involve ambiguities or inconsistencies that other people don't seem to notice.

It's a common finding that dyslexic students need to know why and not just that something is done in a specific way. But when the systems themselves are illogical or inconsistent, then confusion happens. It is better then to explicitly discuss inconsistencies and "exceptions" as they

exist in a system - whether it's part of the English language or part of math language and notation.

For those people with rote memory strengths who are happy to memorize anything without making sense of things first - the troubles some may have with 'teen' numbers may come as a bit of a surprise.

Think about it - 25 is twenty-five...that makes sense.:  $20 + 5$ .

28 is twenty-eight...that also makes sense:  $20 + 8$ .

So why is 15 called fifteen? Should it be tenty-five?

Or 18 is eighteen instead of tenty-eight?

The teen number words are named with the ones place first instead of the tens. No wonder students are confused if they are trying to make sense of the words that correspond to number representations in math.

Better to explicitly teach the teen numbers as being the opposite direction of the ty numbers (twenty one, thirty two etc.) than have them continually get confused about their names.

As some Orton-Gillingham or structured literacy curricula do, if you are the parent, tutor, or teacher, just say what you know of how the naming of these numbers came to be - the name for numbers like fifteen can date back before the 12th century. The teen meant "ten more than." From [etymonline.com](http://etymonline.com):

## fifteen (adj., n.)

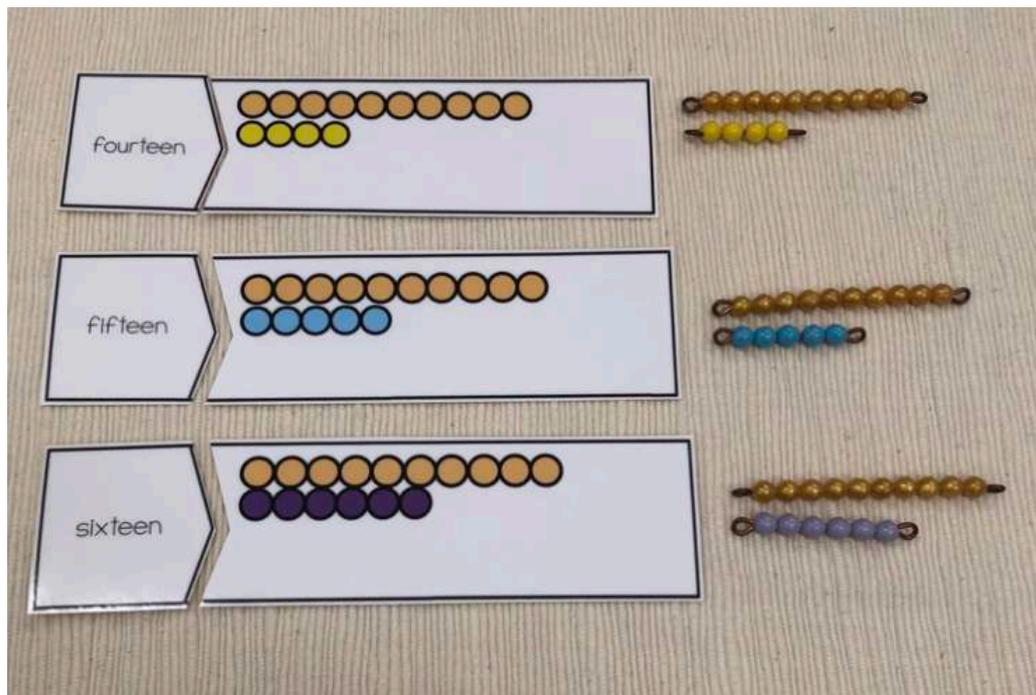
"1 more than fourteen; the number which is one more than fourteen; a symbol representing this number;" Old English *fiftyne*, from *fif* "five" (from PIE root **\*penkwe-** "five") + *tyne* (see **-teen**). For vowel shift, see **met** (v.). Cognate with Old Saxon *fiftein*, Old Frisian *iftine*, Old Norse *fimtan*, Swedish *femton*, Dutch *vijftien*, German *fünfzehn*, Gothic *fimftaihun* "fifteen." French *quinze*, Italian *quindici* "fifteen" are from Latin *quindecim* (from *quinque* "five;" see **quinque-**; + *-decim* (see **-teen**). The number of players forming a side in rugby.

Place value, that is that the position of a digit within a number has particular significance, is an important concept to reinforce while students are in their heavy calculating years.

To teach the teens, it's good to teach them just all to themselves and pair them with as much manipulative practice as might be needed.

Some examples:

Using [Montessori](#) beads and cards:

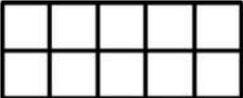
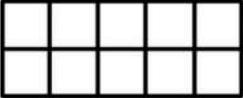
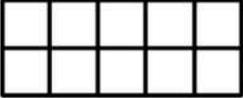


10-frames like these from Teaching Mama are also good to reinforce with the number names.

## TEN FRAMES

*with teen numbers*

	+		=	15
	+		=	17
	+		=	14

teachmama.org

Sometimes because the teens and ty numbers (like twenty, thirty...) are difficult, they are taught together - but we recommend learning them separately. Often downloadable materials may need to be adapted slightly to include the number words. Names of numbers can be quickly assumed in a busy classroom, but for many students, the instructions should be slowed down and appropriate written labels placed with numbers and symbols.

Rather than these print manipulatives, some students prefer physical materials like [Unifix Cubes](#) or [snap blocks](#). [Base ten blocks](#) or other helpful manipulatives.

If manipulatives are necessary for your student, they can be requested to be part of the 504 or IEP. We've known students who continue to use them at university.

For games to master the "teens", check out this [page from The Mailbox](#).



# GETTING STARTED: DYSLEXIC COGNITION



What is the best way to start working if you're dyslexic? It's not always what you think.

For parents supervising homework, the "starting to work" process for their students can look maddening.

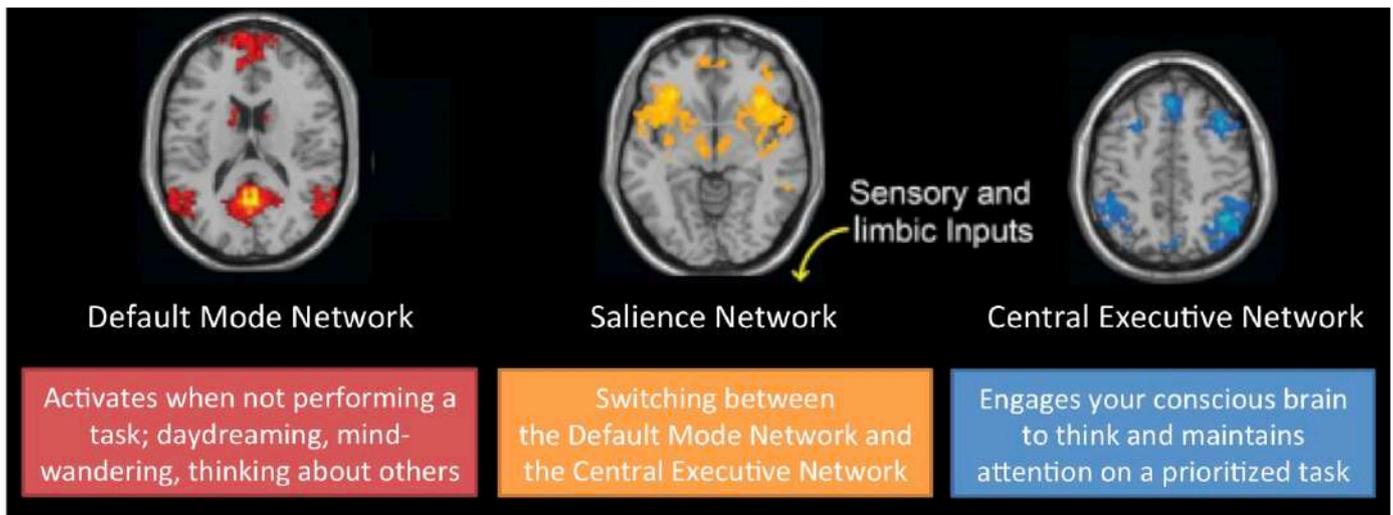
You may clear away distractions, put them at an empty dining table, make sure they have every thing they need - then peek in an hour or even two later...and nothing has happened. They may be looking up at the ceiling, twiddling a pencil, or surfing on the internet. Is there a better way?

Or maybe this is you as an adult. You know you have to do something, but you can't seem to get started. Is it procrastination or something else?

Without completely getting into the weeds of how the brain works, I do want to talk about three large scale networks in the brain that seem to be involved with a lot of brain function, including thinking, problem solving, and completing tasks.

Those three networks are the default mode network, salience network, and central executive network. The default mode network has been found to be more active in dyslexic people (read more in [Mind Wandering, Reading, and Dyslexia](#)).

A simple way to think about these three networks is that the Default Mode Network is the "daydreaming network" that is important for certain types of creative thinking, mental simulation, reflection, and problem solving. The Salience Network deals with emotional arousal and attention, and the Central Executive Network deals with conscious task prioritization and execution.



[Reference](#)

The three systems also have their counterparts in how experiences and information are stored and subsequently remembered.

All three systems have advantages and potential drawbacks. Understanding how each works in various tasks can help us understand why problems arise and, importantly, how we can help when they do.

## AM I PROCRASTINATING, DAYDREAMING, DISORGANIZED, EXPERIENCING COGNITIVE OVERLOAD?

Whether you're looking at another person or examining yourself, it may not always be easy figuring out whether a task has not started because of struggles with procrastination, daydreaming, disorganization, or cognitive overload.

Procrastination is its own complex psychological subject, but can involve things like [fear of failure](#) and [anxiety](#).

What about daydreaming? If it's true that the default mode network may be a preferred network for processing information for many dyslexics - then daydreaming is not really a "problem", but rather a feature of cognition. What we should be doing is figuring more how to harness its powers.

## GETTING STARTED

### HARNESSING THE STRENGTHS OF THE DAYDREAMING NETWORK (DEFAULT MODE NETWORK)

Initially underestimated in creative problem solving, we now know that it's quite important in many types of higher order thinking - like mental simulation, finding associations, and visualizing the future.

#### Signs of Overactive Daydreaming

- losing track of the task
- having unrelated daydreaming pull you away from the task
- false memories - confusion between reality and imagination
- loss of time with little to show for it

#### Focusing the Daydreaming

If the problem is an over-active daydreaming network, then narrowing the brainstorming process at the beginning is a better idea rather than just trying to reduce distractions.

For a book report-type or question-focused assignment, several simple tried and true practices might be tried:

- Re-reading the assignment or keeping the essentials of the question or assignment clearly in view
- Talking over your initial impression of what you read or what you plan to do
- Looking for examples (good or bad) of what you are trying to create. Sometimes a student who has dutifully read a book, is completely stumped about how to convert that experience (a movie in their head, feelings) into a 1-3 page paper. Seeing any example (even a bad one) can help them recognize how they can start. Sometimes seeing a bad example is even more helpful than an overly academic one; seeing something they disagree with may give them ideas of what they want to say.

## Reduce the Cognitive Load Before Daydreaming

- Gather information, then unfocus the mind to daydream / brainstorm. Gathering information and details is a different activity from daydreaming. Do the ground work first to reduce the cognitive load later. Essentially, get the facts for the paper or project before planning to daydream. Don't confine yourself to a desk. Go out for a walk, take a shower, go for a drive, or do some boring chore - the ideas may come to you later.

## Power Up Your Assignment with Default Mode Network Thinking

- Another way to activate the default mode network is to use counter-factuals, or scenarios that run counter to reality. What would've happened if the US hadn't entered World War II or Pride and Prejudice had a different ending?
- Default mode network is also associated with social understanding of people, empathy, theory of mind, and seeing from others' perspectives. That be a source of innovative thinking from dyslexics. Some examples that come to mind are scientists like Mimi Koehl imagining what it was like to be a tiny floating coral larvae in the midst of big movements of the ocean or James Lovelock complaining that the science of bacteria was completely focused on diseases and bad things rather than the good that comes from many bacteria:

"...You might say, that was what was wrong with bacteriology as taught in those days, because, it, it caused people to imagine that bacteria were largely pathogenic nasties. There was very little that was taught about the enormous variety of natural, normal organisms that exist in the world, in fact that run the whole system, and , the infrastructure of the whole planet. So it was a very biased, one-sided, humanistic, pathological side of bacteriology." - **James Lovelock**

## GETTING STARTED

### ORGANIZING IDEAS

Besides some of the suggestions about organizing ideas, other practice strategies like being able to dictate to a scribe, writing down key words or mind mapping ideas may also be a way to start if organization is a problem.

Even those who prefer to work quietly by themselves rather than in groups, may find it helpful talking over ideas with someone else in order to get started writing.

Some ideas for creative book prompts can be found at [We Are Teachers](#).

### REDUCING COGNITIVE OVERLOAD

Finally, if you have a student who can't seem to get started on a paper or project (or perhaps it's you) and you know all the groundwork is done, think about whether the initial task is so overwhelming that it's too hard to know where to start.

Most people with dyslexia may be susceptible to cognitive or working memory overload; as a result, breaking down tasks into little microtasks then tackling one at a time is good practice.

- Break down into smaller tasks
- Give examples of what might be expected.

Dyslexic minds also excel in divergent thinking - which is definitely a strength... but the flip side of this is that it's possible to keep leaping to new ideas and not returning to the starting point which is the task at hand. Or in the explorer-exploiter context, a student or project manager who continues to explore and exploit (contributing to cognitive overload) without closing the gates, saying the data gathering has ended, and moving on.

Some students may also get into multiple-perspective loops seeing too many sides to questions and answers that they can tie themselves into knots. Sometimes seeing a simple example of an essay resets their goals to a 6th grade A or B essay rather than a graduate thesis.

- Finally, technology is almost always a friend.

You can sketchnote, dictate a mindmap, and organize a paper in a visual way that makes sense, then use writing software to proof work and suggest rewordings or word substitutions. One engineer we know writes all his papers in PowerPoint because he can use the slide sorter function to organize his ideas in a visual or spatial way.

In the video below, check out one student's suggestions of 10 apps and extensions for productivity. In addition to old favorites like [Grammarly](#) and [OneNote](#), there are new ones I hadn't heard of before like the [OneTab](#) extension (I would use it with Firefox because Google Chrome tracks website visits too much) which saves hundreds of open tabs into a single list to avoid the pesky problem of looking for content in a particular open tab.



# THE ACCESSIBLE CLASSROOM

Currently, I have a group of teachers in a principals' training program taking my Dyslexia for Teachers course. In answer to my question about whether their classroom was accessible, one teacher answered that she was sad to say that her classroom was not as accessible as it should have been. She is not alone. More often than not, classrooms aren't fully accessible so students are left on their own to figure out how to complete assignments and tests.

One point that this teacher made was text-to-speech support was only emphasized during testing, and not for routine classroom work involving worksheets or textbooks. Every classroom is likely to have students lost in a sea of text, perhaps afraid to speak up.

## WHAT TEXT CAN'T MY STUDENT READ?

As basic and simple as this sounds, accessibility for all students is often elusive. Most general education teachers receive little guidance about accessibility of materials, leaving most classrooms with small or large problems of accessibility for their students.

Many teachers assign appropriate reading-level books for students during free reading time, but the following needs are often overlooked:

- Written assignments and worksheets
- Writing on the board
- Assigned textbooks (especially social studies, science, math, foreign language)
- Test questions in all subjects, including math
- Signs in the classroom, include free choice or learning centers
- Handouts, Readings

- Text-Based Reading on computers (website research, posting on a class blog or discussion forum)
- Are teachers assuming my student can take notes?  
Most students with dyslexia will have difficulty with note-taking into their college years. Accommodations and modifications may be needed.
- Is visually crowded information impossible for my student?  
Many students struggle reading or analyzing visually crowded material. Some visual material (like word searches) may be physically impossible to complete.

### ARE AUDIO AND VISUAL SUPPORTS AND BEST TEACHING PRACTICES BEING USED TO SUPPORT MY DYSLEXIC STUDENT?

- Picture and Spoken Support for Text  
Whenever possible, support text with pictures and verbal descriptions.
- Students with a print disability should be provided with e-book or e-book or audio options through [Bookshare](#) (free in the US for those who qualify) or [Learning Ally](#). If a student is not formally identified and the school does not have an institutional Bookshare subscription, then testing through the [Neurolearning](#) app may qualify them.

There are a wide range of options (including several free) for converting -

A scanning phone app that convert text to audio

Examples of free or free-premium apps include [Speechify](#), [Natural Reader](#), and Microsoft Office Lens ( [Windows](#), [iOS](#), [Android](#)). Office Lens is free, but the most options are available only if you have a Microsoft 365 subscription.

[Scanning pens](#) are also an option (and some schools have used the American Rescue Plan funds to purchase them). For tests, some schools may not permit the use of cell phones that could access the Internet, but scanning pens may be used



For those who aren't familiar with OCR (optical character recognition), you can use your phone to take a picture of a text, then have it read to you. So, a student who has trouble reading a word problem or a hand out, can have text read through an app on their phone. Add an earbud, and it's everything is instantly accessible.

Here's [Speechify](#):

## Does the Reading for You

energy reading, and more energy comprehending.

speed for you. Start at 230 words per minute, and build to 500 words per minute, the speed most people read.



Natural Readers:



Scanning Pen's Exam Reader pen:



"I'm somewhat of a polymath. I feel at home in almost all branches of science, from molecular biology going down to hands-on biology bacteriology, medicine, even to a small extent, animals, plants, right the way through to chemistry and all branches of it, and physics...Often the interesting things are at the border between disciplines."

- James Lovelock

