

Teaching the 3 R's to children with learning challenges (my version)

by Aimée Engler

My son is 10 years old and wants to be an engineer. He's wanted this for about 4 years now, and we are helping him to aim in that direction. But... he has dyslexia, dysgraphia and dyscalculia, and a few other things going on as well. Problem! His brain is continually putting up blocks which he has to overcome either by smashing through them or circumventing them in some way. When we withdrew him from school half way through year one he was far behind his peers with little hope of catching up without some serious intervention. So we gave him that intervention, while simultaneously throwing out the concept of comparing him with others. It took a couple of years to figure him out but 3.5 years later he can now read and do maths at about reception/year 1 level. We're pretty stoked about this! It took us a while to figure him out, and things are still s.u.p.e.r.s.l.o.w but there's definite forward motion.

The biggest issue I had in teaching my son with learning challenges is that where I live all the support you get (which to be honest doesn't always amount to much) remains in the school system. If you choose to withdraw your child then you choose to leave the support behind. You're on your own! And it's an expensive investment: researching different programmes, signing up to seminars, pondering whether something would be the right fit, before finally taking the plunge and buying it... Only to find out that it's not what you thought it would be and you've just wasted time, effort, money, and brain cells. Oh, and much of it is geared towards kids in school and does not translate into the homeschool environment. This is a tough enough situation when you have a child who learns at the 'normal' pace, but throw in learning challenges and you really have no idea what you're doing! I largely had to learn how to teach my son through trial and error and I hope this isn't your story. Asking others who have gone before you is probably the best help you'll get which is why I'm writing this down.

A real turning point for us was when God sent an ex-teacher friend who once upon a time taught deaf children, to come alongside and give us a hand. It's interesting how children with learning challenges are similar to children who are deaf, and with her help I came up with this philosophy:

Teach everything slowly, sequentially, and one concept at a time.

Do not assume implicit learning.

Practise strengthens what's been learned.

I don't have a teaching degree but am a homeschooler who's dedicated a large portion of her life to teaching her kids. If you were to google 'how to teach my dyslexic child to read' then you'll find plenty of information, so if you feel the following booklet isn't helpful then feel free to keep looking. Each child is different and there is no 'one size fits all', but I hope my experience might help you on your journey with your child who has learning challenges.

How this booklet is laid out (because it's jolly long and I want it to make sense!)

I'm going to go through in tedious detail my version of this teaching philosophy in regards to the 3 R's, showing step by step the way I did it/am still doing it. Though you'll notice links liberally sprinkled throughout, all resources mentioned are explained in a separate Learning Challenges Resource List located on the website (it's easier to keep it updated if it's kept separate).

I have divided the booklet up into 4 sections:

1. Learning challenges and mental health
2. Reading & spelling for dyslexia
3. Writing for dysgraphia and dyspraxia
4. 'Rithmetics for dyscalculia

For simplicity sake I will be devoting Section 2 to reading and spelling, and Section 3 to the act of writing. In the end though all of the learning challenges as well as the 3 R's overlap in a number of areas so while I have attempted to separate concepts it may be beneficial to read through the whole thing anyway. And before those of you smartie-pants say that dyspraxia is not a learning challenge, it significantly overlaps with dysgraphia in the area of planning so I'm throwing it in the mix anyway.

Section 1: Learning challenges and mental health

I feel it's important to begin on a note concerning the correlation of learning challenges and poor mental health. In South Australia, learning challenges are not recognised as a disability yet they are incredibly debilitating. Imagine that you are 10 years old and walking into a room full of other children and adults and there's the possibility that you will be expected to read or write or do a mathematical somethingness. Would you have anxiety? I would! 'Only babies can't read'. 'You're stupid if you can't count to 20 without making a mistake'. Does your child have the self-confidence to know that just because they are challenged in this area they are still intelligent and more than proficient in other areas? Are they able to stand in front of a group and say they have a learning challenge and are unable to do what is

asked of them? Will the other adults and children understand what that means, or will they just see them as lazy or stupid?

I'm very keen to ensure neurodiverse children have strong mental health so will be continually providing content to help you navigate this area on my website. However when it comes to teaching them the 3 R's, here are a few pertinent tips:

1. If your child has anxiety, or is in perpetual defence mode (fight/flight/freeze) then regardless of what you do, they will not learn. If this is your child then stop trying to teach them the 3 R's and work on their mental health instead.
2. Keep lessons short and sweet. What you may find easy, magnify the effort ten times and then you may begin to understand how your child is finding it.
3. Teach one concept at time. Your child needs time to process the knowledge and if they are bombarded with too much then it'll all get muddled up and nothing will 'stick'. Don't waste their time or yours.
4. Don't be pressured into thinking the 3 R's define how intelligent your child is or their potential. While you should seek to overcome or circumvent this challenge, focus more on their strengths. Invest the time and energy into what they ARE good at.
5. Be sure to strengthen their executive functioning. I'll be talking about this later on in Section 3 however there is a strong connection between the two areas. This means that often learning challenges improve when executive functions are worked on.

A note regarding YOUR mental health: if you're drowning in overwhelm that can accompany parenting and homeschooling a child who is neurodiverse, feel free to outsource the 3 R's. There are tutors available and as long as your home education department approves then it's a perfectly legitimate road to take. You cannot be 'everything' to your child and if you do not have the capacity to figure this out then focus on what you can do and leave the rest to someone else.

Section 2: Teaching a child with dyslexia to read and spell

Learning the 'nuts and bolts'.

Learning the alphabet and sounds

Before your child starts reading it's a good idea to let them know that words are actually made up of different sounds, most of which are represented by individual squiggles. This is called teaching phonemic awareness. The best bet is to play with the alphabet. Here are some ideas I used for my son when he was 6yo, after he had been at school for 1.5yrs but had major gaps in his learning. For an older child you'll need to be creative in a different way.

- alphabet blocks
- make alphabet out of lego
- alphabet jigsaws
- put objects in a bag and play alphabet soup
- hide letters in a rice box
- 'eye spy' or 'I went to the shops...'
- stick letters around the room and have them run to the one you call out
- sing the alphabet song
- Or... Cut out and laminate the letters, put them on the floor of the kitchen with a blob of shaving cream under each, then give the kid a fly swat and call out a letter. Big Mess. Everywhere. But it was definitely memorable.



Lego train

To help with the understanding that words are merely sounds put together, when you say a word, emphasise the different sounds. I.e. 'duck' = 'd u k', 'cloud' = 'k l ow d', 'jellybean' = 'j e l ee b ee n'. Don't spell it out, phonetically *sound* it out.

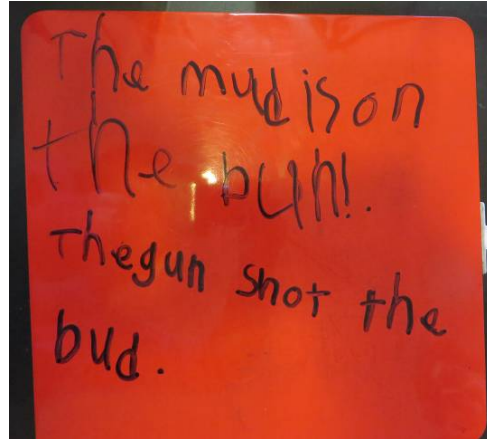
Putting together letters to make words, and words to make sentences

After stuffing around with all sorts of different ideas and methods, my ex-teacher friend set me on the path of enlightenment by showing me how to use short-vowel CVC (consonant vowel consonant) words and give a set sentence to create. A lot of curriculums mix the vowels up or move too quickly onto the next, however we did one vowel thoroughly before focussing on the next. It was slow, it was repetitive and it was sequential. We used [Primary Phonics](#) as the basis for progression.

1. Word list: cat, mat, hat, rat, pat, ram, jam.
2. Write them, and corresponding pictures, on separate cards (as in, each card has either one word or one picture on it).

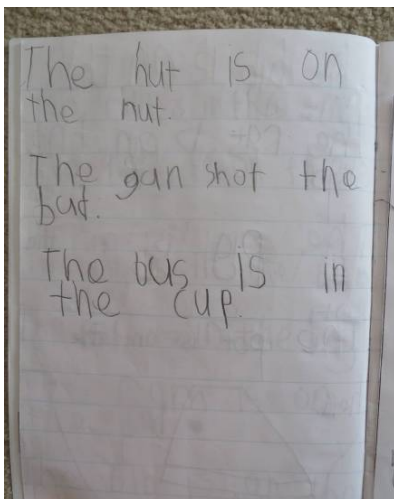
3. Match the word card with its corresponding picture.
4. Put these words into a sentence: The '...' is on a '...'.
5. Complete a worksheet.
6. Read material that complements this vowel sound.

Once you have finished short vowel 'a' then move onto short vowel 'e'. Once all the short vowels are finished, move onto the long vowels. It is excruciatingly slow but you are guaranteed not to have any gaps in your child's learning!



Before you say, 'I'm dying of boredom!!!' hear me out.

- Set sentences are very useful as, a) they teach how to write a sentence, and b) they cut out a concept – the process of thinking of a sentence to write! Remember, we're breaking down the 3 R's and teaching them one concept at a time. This way your child doesn't have to think of how to use the words, or how to spell the words, they just have to choose which ones to use.
- The repetition within each lesson works in your child's favour. It helps cut out the fluff and let's their brain focus on what's the important lesson to learn.
- Naturally it wasn't long before CVC words became CVVC or CVCV, and sentences became longer and more complex. If your child is cognitively impaired you would probably have to go through each vowel at the same slow pace, however if they 'merely' have learning challenges, once the brain is given all the information it needs to overcome this initial block then they'll start to skip ahead and you probably won't have to go through all the vowels in the end (at least, not in this tedious manner) (hopefully).

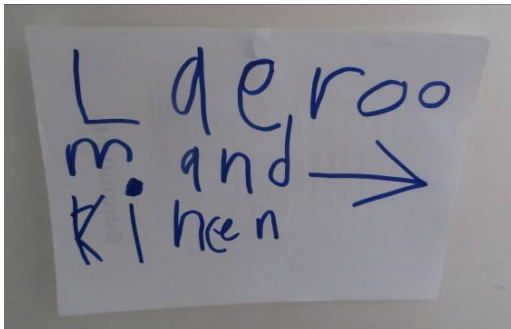


The art of writing itself is highly challenging and exhausting for kids with blockages:

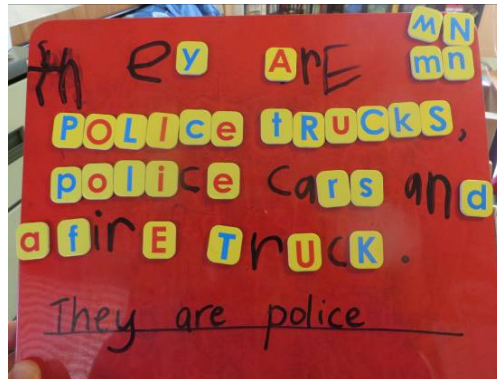
1. Hold a pencil correctly to make a mark on the paper.
2. Don't press too lightly, but not too heavy either.
3. Make the writing not too big but not too small.
4. Where do you start writing and where do you stop?

5. Always write in one direction and stay on the line (but sometimes you go under the line, and quite often into the 'sky')
6. Think of what to write (not just the entire sentence but the individual words).
7. Spell the individual words. Correctly.
8. Letter formation – where do you start? Where do you end?
9. Make sure there are gaps between words, use capitals, full stops, etc.

In order to separate the different concepts and scaffold him as much as possible, my son would choose the words then copy it out using letter tiles. It meant less thinking and more doing and he'd have a giggle when the sentence made no sense. Eventually he would then copy the words onto a whiteboard and finally he'd use pencil in a book (with very large spacing). Sometimes neatness was emphasised, sometimes grammar, sometimes letter formation, but never all at once. The more I separated the concepts the faster he learned.



Age 8 (sign saying lounge room and kitchen)



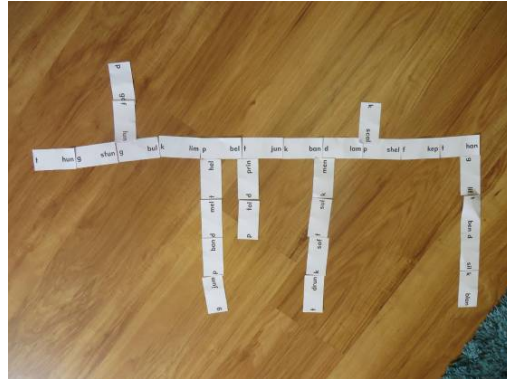
Age 9. The jump to more complex words meant he resorted to using magnet letter tiles once more.

Learning to Spell

You'll know when it's time to move from the simple stage of putting letters together and forming sentences onto the nitty gritty of learning to spell. Each child is different so don't feel like there's an age attached. But the question is, 'what do I do?' Ah, good question and one that I cannot answer for you. How I learned to spell remains a mystery to me as the English language has so many exceptions to its rules that makes it extremely complicated. Take the sound 'ir, er, and ur': THERE IS NO RULE!!! Thus while rules can come in handy to learn don't be too quick to discount rote learning.

'I before e except after c'. Hmm... their, weird, science, species, leisure.
Head slap.

Some would say that regularly communicating with other children through gaming or texting is particularly useful in this area as a) they are practising writing and b) there may be a natural desire to not look like an idiot and misspell things. I'm yet to try this method and have my doubts that a child with dyslexia will naturally learn in this way. It is like the notion that a child will naturally learn to read - if their brains are not naturally wired to read (aka they have learning challenges) then they need explicit teaching. Remember,



do not assume implicit learning. Either they become old enough to figure out a way to help themselves (if they're that way inclined. Unlikely but possible) or you do it for them, but it's not going to come naturally.

Most people will look for a spelling curriculum to teach their child to spell. We dabbled with [All About Spelling](#) and [Sound Waves](#), before settling with [Nessy](#). It includes on-line learning as well as sheets and printable games (the photo just above). After using it for a year I've come to the conclusion that Nessy isn't for us either so I'm now on the look-out for another option. Note the trail of expensive investments...

'Just get them reading'

I like the [Brave Writer](#) mantra of 'just get them reading', and 'just get them writing' (more about that in Section 3). Do whatever it takes to make it happen because once they start they will hopefully be inspired to not stop. Typically you start on readers to accompany the 'nuts and bolts' stage, then move onto chapter books then novels (with a few stages in between), however if this isn't working or your child mutinies then try something else. Remember: just get them reading!

It is difficult to find readers that move slow enough but retain interest. There are only so many stories you can read where 'a dog and a cat sat on the mat'. [Primary Phonics](#) has some great readers that follow its curriculum closely, and I also liked the readers created by [Progressive Phonics](#). Don't expect literary greatness but they're free on-line and come with accompanying workbooks if you're keen. [Speld](#) also have dyslexia-friendly books however we came across them while my son was at school and I decided they weren't for us, but check them out if you're interested – they're also free and the updated look makes them quite appealing. For a while we used [Usborne First Readers](#) and [All About Reading](#) readers as they are suitably slow

and systematic in their approach. The former even have comprehension tasks at the back, which is nice.

While my 10 year old's reading level still sits comfortably within the realms of these readers they apparently lack excitement and he'd 'prefer to read something else'. Fair call. If our son is going to enjoy reading then we had to find something that he is willing to read for enjoyment. Thus we were thrilled when he became infatuated with Star Wars and we discovered that the library has HEAPS of readers. True, they're way too hard for him but he is determined to read them! He painstakingly reads a page (memorising the longer words and slowly sounding out the shorter ones) and my husband reads a page. If a full page is too much for him then he'll read a line or every other word – whatever it takes!

Find what interests your child and 'just get them reading'. This does get harder as the child gets older and completely outgrow the books they are capable of reading. If a 10 year old is likely not to want to be reading things that talk about cats sitting in hats then a 13 year old definitely isn't! All I can advise is to figure out what has some appropriate content that they can read, and share the reading with them. Oh, and of course read regularly. Practise always helps consolidate a new skill by strengthening those neural pathways.

Consolidate learning with other materials

To mix things up and keep things interesting think about adding in other materials/ways of learning. This suits the notion of preferencing your child's learning style (visual, auditory or kinesthetic) but still ensuring they're not boxed into one approach. Find/create worksheets, play games, use technology, add in aspects of other curriculums; if something looks good then why not try it out?

I throw in:

- board games
- worksheets (some I made up, some I stumbled across)
- [Starter Stile](#) / [Smart tray](#)
- mazes
- audio books

Check out the separate resources page to find out more each one.

Using technology for reading

There are a few games and apps you can use to either teach or consolidate learning. [Nessy](#) is obviously one of them, however [Reading Eggs](#), [Teach your monster to read](#), [IXL](#), [TTRS](#), and [Mrs Wordsmith](#) are a few that I've heard of. Other than Nessy these are not dyslexia specific but they might be of interest.

Your child can also use technology to read for them. There are programmes that read text off of the screen, as well as pens that read text from books etc. I have no experiences with screen text readers (you'll have to research that one) however we did buy my son a [C-pen](#). Research told me that this was one of the better brands on the market and it really does do a good job, though I would recommend leaving it until your child is a teenager and has attained a reasonable reading level for the following reasons:

- Holding the 'pen' at the required angle and moving it carefully and slowly along a line of words requires some dexterity and strength which my 9 year old didn't have.
- The 'pen' ignores full stops and commas unless the user actively stops or hesitates at these places, thus the child must know the basics of grammar and sentence structure and be able to stop and start when required.
- The 'pen' doesn't always get things right so being able to read along is crucial to ensure accurate reading of text.
- Manipulating the settings to ensure it reads at the correct speed, with correct gaps between words, at the desired volume etc. also requires being able to read. Daft really, but that's the truth.

Section 3: Teaching a child with dysgraphia and dyspraxia to write

The art of planning

In a nut shell, dysgraphia is about the functional process of writing - the layout of the page and the physical act of writing - however the definition is at times widened to include the brain processes that go on behind writing (ie. the planning). Dyspraxia is about the planning and implementation of fine and gross motor skills. Hmm... do you see an overlap here? Regardless of what it is called, writing requires a huge amount of planning and this necessitates that all executive functions to be intact. Alas, dysgraphia/dyspraxia affects these functions *significantly*. If your child struggles to write anything (and they seem to struggle to plan, remember things, time manage, set goals, and start/finish things in general life) then this indicates that they are indeed lacking in this area and so generally working to improve their executive functions will help them specifically improve in the area of writing.

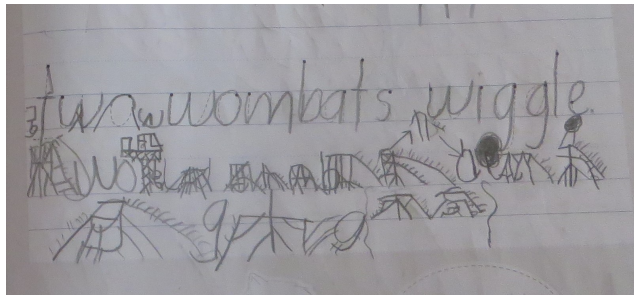
As the child gets older, the more creative you may have to be to overcome their dysgraphia/dyspraxia. Research ideas in how you can strengthen their executive functions, while ensuring that writing tasks lie purely within their spheres of interest to increase engagement and improve attitude.

The art of writing

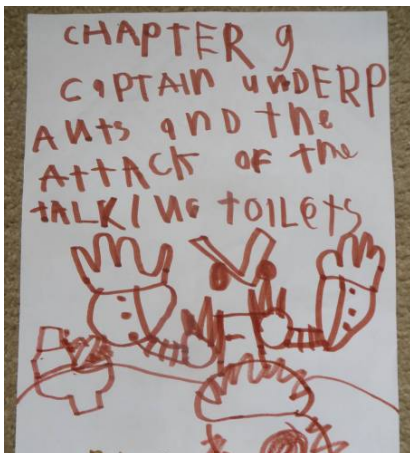
Dysgraphia impacts a child's ability to physically write, so practising the art of writing and letter formation is a great idea to instil confidence when it comes to writing. These kids also tend to struggle with where to start and end a letter, and letter reversals, so explicit teaching and a lot of practise goes a long way towards success. The challenge for you is to make it interesting! There are handwriting books out there such as [Writing Time](#) or [Handwriting without tears](#) (don't be fooled by the title people!) but even the ones that attempt to make it interesting tend to be really boring. Either the child will want to sit and write, or they won't, no matter how interesting the lesson is. You can get creative by having them trace over your own laminated sheets or ... something else. Nope, I really can't think of a way of making it exciting. If you work that out then let me know!

Copy work is the same as handwriting (and thus has the same benefits) but on a grander scale. Whereas handwriting books practise forming letters and words, copy work is the practise of re-writing sentences (grammar included). If you're a Charlotte Mason fan then you'll have heard of this concept, however if you have no idea what I'm talking about, then it's basically copying a passage of choice. Once again, either a child will love it or hate it so it's difficult to make it interesting. You can buy books, you can get them to choose what to copy out, or you can choose for them (eg. Bible verses).

I bought a handwriting book for my son ([Writing Time](#)) that I hoped was as interesting as it promised. It even has 'adventures in handwriting' written on the front! But alas, it lied (in his case, at least). He spent sooooooo long completing one page that I only gave him



a single line to do, and even then he would take ages and get distracted by finding a way to 'make it more interesting' (as you can see above). Meanwhile, of his own



volition he will copy out words from a Star Wars book, or ask me to print out names of things for him to copy, including pages from Captain Underpants books. It goes to show that, like in a lot of other learning, the best way of practising writing is to work with your child's interests.



Meanwhile, in light of separating the concepts, I once upon a time happened to pick up a cheap 'pirate storybook' thing from some shop (vague, I know) and he was expected to 'write a story' from this once a week. It gave the story idea and suggestions and gave parameters of how he was to write by having huge line spacing and limited space, all he had to do was physically add in a sentence or two. This was the concept we were focussing on. My expectations were fairly low when I said, 'finish a story' - it could comprise of as many words as he chose (one story he simply wrote 'The end') however I insisted on correct word spacing, use of capital letters and commas, and spelling. He also had to write as neatly as he could and there was a fair bit of rubbing out! By the end of the book his writing was neater and his grammar was better. Success! [Mrs Wordsmith](#) has a similar product if you're keen to find one like it.



one writing task, see if you can separate them into a couple, and be realistic in what your child requires to succeed.

Now, had I given my 10 year old a blank A4, 8mm lined page and told to write a story from scratch (ideas and all), it would have been complete rebellion. So perhaps think about how you're presenting work and what expectations you're communicating. Instead of combining concepts into

Before you think, 'Wow, this child is amazing! I wish mine would love creative writing as well!', it's no longer 2021 and darn it, 2 months break and things have changed! I was all set to continue this wonderful trend however day 1 of 'creative writing lesson' was met with disinterest and refusal. The magic was gone. So now I have to re-think the plan: how will I 'just get him writing' this year? I'm yet to work that one out but I have a feeling the answer may lie in learning poems about toilets...

Using technology for writing

Professional advice is that kids who have learning challenges move onto using technology as quickly as possible for writing. This cuts out the actual process of physically forming letters and highlights spelling/grammar errors. I'm not opposed to this, although learning to type adds a whole other dimension of frustration and requires the child to have access to a computer rather than just an ipad. Gaming would give a child the opportunity to incorporate learning naturally although one-fingered or two fingered typing produces a vastly different speed compared to using all 10. However typing proficiently with 1 or 2 fingers is probably still faster and easier than writing for some children so I'd say that's acceptable. If your family prefer to avoid the gaming scene or you're generally a low-tech family, then there are loads of free or paid typing programmes out there ([TTRS](#) is one of these). You can also encourage your child to write emails to grandies or friends, teach them programming/coding, or encourage them to create something (eg. a bound book or a game board) that requires a neat, typed final product. Be creative!

Dictation programmes are another way to go, largely cutting out the physical step altogether and allowing the child just to talk. There are free ones and paid ones – do your homework before you invest. Some require a certain level of editing skill, and watch out if your child has any expressive speech issues as the computer won't be able to understand them at all and you'll find that it wasn't worth the effort of setting up in the first place (our experience).

Independent work to improve executive functioning

So far my son's learning has been one-on-one, heavily scaffolded, with a lot of help to stay focussed. None of the above was achieved by sending him off by himself. While we are continuing with progressing his learning in reading and writing, I feel he has finally reached an age and development where he can be directed to complete a simple task without supervision. Huzzah! So I've decided to introduce a folder with sheets on different subjects that he must complete every other day: maths, English, brain training mazes, and various [Dyslexia Games](#) sheets. BUT I guarantee I'm not doing it for the reason you may think I'm doing it for. The work that's in that folder isn't designed to teach him anything new.



You may be thinking, 'What? A homeschooler giving their child 'busywork'? Waste of time!' and I'd completely agree, if the reason behind it was to learn whatever was on those sheets. Rather, he'll be learning the following:

- ⇒ time management
- ⇒ self-motivation
- ⇒ focus
- ⇒ independence
- ⇒ And of course, the opportunity to practise/consolidate what he has already learned.

Essentially he's working on his executive functioning skills (not to mention character) which need to be strengthened in order for him to overcome his many challenges. Naturally I make sure he's only expected to do this on days when it's logistically feasible and his brain isn't already exhausted.

Section 4: 'Rithmatics

As with the process of writing (and reading, for that matter), there are a LOT of things going on at once when it comes to maths so the same philosophy remains: separate the concepts as much as possible, don't rush learning, teach it in order, be explicit, and give them lots of practise. While doing this might seem like your child is going to take FOREVER to learn the basics, in reality it streamlines the learning process and they are ultimately able to grasp things quicker. If you can get away with it, the slower you teach your child maths the less gaps they'll have in their learning, which is a win in the end.

Teach both sides of maths

I've decided that maths can be broken up into two spheres:

1. 'Other' processes such as logical thinking, problem solving/strategy and spatial reasoning.
2. Typical maths concepts (addition, subtractions, geometry, probability etc).

Both impact each other so don't think teaching maths is all about learning to count and subtract and this is what you should focus exclusively on. They are equal in importance so try to incorporate learning within both. Because a child with dyscalculia has a block when it comes to understanding classic maths concepts, they can be extremely creative in other ways, including how they problem solve and their lateral thinking. Thus with a bit of encouragement and training, I have an inkling that they will only go from strength to strength in this area, and we want to work on their strengths, right? Meanwhile still plod along with those pesky maths concepts. I've included resources and ideas of how to work on both of these areas in the Resource list.

Use manipulatives

I highly recommend using manipulations in maths and as many different types as possible. I recall hearing that beyond year 5 (or was it 3?) manipulations were no longer used in schools, and the idea of using an abacus or blocks does smack of 'babyishness'. However maths is very theoretical-based so give them the maths manipulations (ie. physical representations/supports) that they need to help them understand, and don't remove these until they're ready. Perhaps they'll never be ready, and that's ok! As an adult with dyscalculia I still count on my fingers, sometimes including my toes if I need 20 digits. And even then I'm known to stuff up, especially if I'm tired or not fully concentrating, so I either ask someone else to re-count or I use a calculator. Remember, I'm an adult! Here are some of the different manipulatives I have for my son and it depends on which best fits the concept being taught as to which I pull out to use.



Be reasonable with expectations

I'm currently of the opinion that the basics are all that's needed: addition, subtraction, multiplication (if they can be memorised then that's great, but I'm not fussed); as well as a basic knowledge of money, fractions, shapes, angles, probability, volume, statistics, time, directions ... and possibly more that I can't think of right now. Just the basics of each. Most adults don't use maths concepts beyond this list as we use technology to obtain an answer. Certain jobs do require the knowledge of certain concepts but these can be learned at the appropriate time, and probably in a fraction of the time as well! If a teenager does need to know a particular maths concept then there's plenty of time to learn it once their brain is more developed. A child with dyscalculia will need to focus on, and spend their time practising, the basics. While I would never discount a child's potential, the basics are going to take a lot of effort anyway, so slow things down and be reasonable with your expectations.

What does sequential look like?

In Australia we have this system where you dip into one concept then dip into the next and the next and the next and then they might come back around to the beginning or they leave it to the next year before returning to it. This isn't so great for kids with learning challenges. It's my understanding that in America they do things differently with a 'block method', where it's all about mastering one concept before moving onto the next. Great for kids with learning challenges! Remember, practise practise practise! Of course, it also means being pretty creative to keep them engaged. This doesn't mean that you can't have breaks – sometimes a break is needed for the brain to process what its learning – however rather than flicking onto 5 other subjects before returning, just move onto one briefly, or perhaps take a break completely from maths. Alternatively, teach it using a different method for a bit.

My son came home from school knowing kinda sorta how to count to 10 and back. He had grasped that numbers mean something and could count (slowly and painfully) the items they represented, but mentally imagining that number and manipulating it is still difficult for him. Unfortunately I had no idea what I was doing (remember, not a lot of help out there!) so it was by trial and error and wasted time, energy and money that we are at the place we're at now. If I were to do it again, this is the order I would teach him (and the manipulatives I used when I eventually did):

1. Number sequencing – eg. 100 board, number lines.
2. Subitising 10 – eg. using dice, counters, cuisenaire rods (I used Maths U See's manipulative). There are heaps of game ideas on the internet.
3. Place value – eg. Cuisenaire rods, abacus, counters, unifix cubes, [Sir Cumference book series](#) (they also cover other concepts).

4. Basic addition – eg. board games, card games, counters, abacus, [Greg Tang](#) resources (they also cover other maths concepts).
5. Basic subtraction – eg. ditto.
6. Time (hours and quarters) – eg. storybooks, play clocks, [Zingo Time-telling](#).
7. Counting hacks (+ 9, + 8) – eg. abacus, counters, Cuisenaire rods.
8. Doubling numbers – eg. card games, Cuisenaire rods, counters, abacus.
9. Understanding and manipulation (including addition) of larger numbers.
10. Subtraction of larger numbers.
11. Money – eg. play money, board games, pretend shopping experiences, real shopping experiences, pocket money.
12. Time (minutes).
13. Skip counting and multiplication.
14. ? (This stage isn't even on my radar for a couple of years)

At the moment my 10 year old is learning his doubles (#8), but you can see my plan for the future. Though he's pretty good at what came beforehand, his brain needs to be reminded every now and then so we do occasionally rehash old 'lessons'. Meanwhile we chat about volume and probability, we play with geoboards, pretend we're shop keepers (this photo shows his 'shop'), have jobs and payment, and practise counting by 10s and 2s.



If your child has dyscalculia, don't feel the need to rush through the list – you've got time!

Teaching maths

There are plenty of maths curriculums out there and I looked at a number before settling on the one I'm using. Initially we tried [Maths U See](#), which isn't a bad option for kids with dyscalculia though I found it too much work for one lesson and only one manipulative, albeit a great one! After selling that at a loss I eventually settled on [RightStart Maths](#) because it fits nicely within my philosophy and roughly follows the sequence above. I often skip lessons or put them on hold while we consolidate learning. My son has been on Level B for the past year and I'm pretty sure we'll still be on it this time next year at the rate we're going. There are many other options out there, including a number of on-line maths curriculums which will be discussed in the next section. You can also consolidate maths learning through other means to keep things interesting. Here are a few that I do:

- baking/cooking

- board games/card games
- [Starter Stile](#) / [Smart tray](#)
- Read story books involving maths puzzles

As with English, maths curriculums can be expensive so try to be sure they're what you want before you purchase. Sometimes you can on-sell them however you'll never get the same as you paid for it, especially if you order from overseas.

Using technology for maths

There are plenty of computer games and apps out there if you'd prefer to use tech to either teach or consolidate learning. I've yet to use any however I've heard of the few (though whether they're good for dyscalculia is another question). [Prodigy](#) seems to be very popular and it's free, though this one seems to have some pretty loud negatives so do your research before committing. Two others are [Teach your monster number skills](#) and [IXL](#), plus a whole heap more if you google. For something extra fun, there are TV programmes out there to watch as well such as [Odd Squad](#) (IMB recommends 5-8yo but I'd say older kids will enjoy it as well).

If you don't want to clutter your house with physical manipulatives you can find [on-line versions](#), though they clearly lack the kinesthetic value so be sure to weigh up the pros and cons.

Phew, we made it! If you're still reading as I wrap up then I congratulate you on the effort. This took a while to write and no doubt took a while to read! I hope you benefit from this information and don't have to endure as much trial and error (aka. wasted time, energy and resources) when it comes to teaching your child with learning challenges the 3 R's. If you have any specific questions then please contact me and I may have an answer (or may not, it depends on your question!). Don't forget to check out the website for further information about learning challenges, mental health, executive functions, and of course the separate resource lists that go through the resources mentioned in more detail (found on the Resource page under Information).