Speld VEWS



Speld
Qld
Kindy
Inclusion
Team

Find out about the Kindy Inclusion Service

Contents

New Speld Qld Assessment Locations	3
Understanding Executive Functioning	4
Speld Qld Member Benefits	7
Spelling rules: Help or hinder learning to read	9
Building an understanding of Place Value	12
Kindy For All	17
Cognitive Load Theory in Practice: Worked Examples	18





New Speld Qld Assessment Locations!

DAYBORO, BENOWA AND BUNDABERG

To book in for a psychoeducational assessment at Dayboro, Benowa or Bundaberg please complete the <u>assessment application form</u>.





End of Term 2 Wrap

Welcome to the end of term 2 Speld Qld magazine. Once again it has been an extremely busy period for all our team with several of the highlights included in this end of term wrap.

The demand for our assessment and screening services is at unprecedented levels. In the last 12 months our psychology team has grown from 8 to 17. We are doing all we can to meet the ever-increasing demand for our services. In term 2 we welcomed another new psychologist to our team at Woolloongabba: Helen Gunter. Helen adds significant experience and further depth to our team.

THIS TERM AT A GLANCE:

- We have received 294 applications for assessments.
- Our team of psychologists have conducted 326 assessments.
- 8 Sounds Write workshops were held, each for 4 days in duration, attended by more than 160 teachers and Speech Pathologists

Our presenters delivered several PD sessions in Brisbane. A sample include:

- o Dayboro State School, Dayboro Assistive Technology.
- o St Augustine's College, Springfield Accommodating Dyslexia in every Classroom.
- o Shorncliffe State School, Shorncliffe Accommodating Dyslexia in every Classroom.
- o Albert Park Flexible Learning Centre, Brisbane City – Ongoing literacy support.

As stated in last term's magazine, we were successful in gaining a funding grant from the Qld Dept for Education for a new Kindy Inclusion Project. As a reminder, this project aims to enhance the participation, inclusion, learning and development outcomes of kindergarten children with additional needs, within their educational setting. This will be achieved through providing workshops, webinars, individual educator support via phone calls, emails, online and face to face meetings as well as working with individual teachers, educators, and all kindergarten staff.

We are currently working with the Department of Education on several projects, with one of our most recent funding programs being the provision of support for Regional and Remote



areas of Oueensland.

AS A RESULT OF THIS FUNDING, WE WILL:

- Travel to regional and remote areas for onsite school visits to facilitate learning engagement and participation, and improve outcomes for students with learning differences by:
- o Delivering psychoeducational assessments by a Psychologist or a speech language assessment by a Speech Pathologist;
- o Consulting and collaborating with school support teams regarding individual goals and learning targets; and
- o Providing advice to schools on adjustments, strategies and the use of resources that contribute to improvement in individualized learning.
- Build the awareness, knowledge and capacity of school staff who support students with learning differences in regional or remote areas through face-to-face and/or online professional development workshops.

Where possible this support will be fully funded, that is, the travel, accommodation and the assessments will be provided at zero cost to the school/parent.

I wish you all a safe, relaxing end of term holiday and look forward to the continuation

of our mission to support all Queenslanders experiencing learning difficulties.



David Oliver, Chief Executive Officer



Understanding Executive Functioning

By Rachael Davis, Psychologist

WHAT ARE EXECUTIVE FUNCTION-ING SKILLS AND WHERE DO THEY COME FROM?

Executive functioning skills are essential for learning, behaviour and development. Just as an air traffic control system at a busy airport safely manages the arrivals and departures of aircrafts on multiple runways, executive functioning skills help us to focus on multiple streams of information at the same time, and revise plans as necessary. The brain uses executive functioning skills to help focus, hold, and manipulate information, as well as filter distractions, prioritize tasks, set and achieve goals, and control impulses.

Children are not born with executive functioning skills. Executive functioning skills are developed through experiences during infancy, throughout childhood and into adolescence. Adverse experiences, and exposure to trauma have the potential to delay or impair the development of such skills, however there are opportunities throughout the lifespan to promote their development.

EXECUTIVE FUNCTIONING



Keep reading to find out how!

HOW DO DEFICITS IN EXECUTIVE FUNCTIONING IMPACT LEARNING?

Executive functioning skills help children remember and follow multi-step instructions,



avoid distractions, regulate responses, adjust when rules change, persist at problem solving, and manage long-term assignments. When there are deficits in executive functioning skills, it may lead to difficulties with planning, prioritisation, organisation and staying on task. All of which are essential skills for engaging meaningfully in education.

It may be hard to identify a child who is experiencing deficits in their executive functioning, as the internal motivations that guide behaviours cannot always be observed. Despite this, deficits in these skills can manifest in a number of outward behaviours. These children can often be labelled as 'lazy' or 'naughty' which is simply not the case! Have you noticed a child that appears unable to sit and eat dinner without getting up out of their seat or sustain attention long enough to complete a brief worksheet? Or maybe you find yourself having to repeat instructions or provide prompts to ensure even the most routine tasks are started and completed. Although there could be many explanations and motivations that drive such behaviours, when there are ongoing patterns observed across contexts, it might be appropriate to consider if deficits in executive functioning are contributing to this presentation.

Behaviours that may be observed at home or within the classroom that could indicate difficulties with executive functioning skills include:

- Difficulties starting and completing tasks independently.
- Difficulties regulating emotional responses to social or academic demands.
- Avoidance of tasks that require sustained attention or non-preferred tasks.
- Prone to distraction (internal) or creating distractions (external).
- Incomplete work or missing deadlines.
- Difficulties with transitions between activities or environments.
- Acting before thinking; difficulties regulating impulses.
- Limited awareness into own behaviours



Have homework written down in the same spot every day



teach executive functioning& study skills



3-5 minutes to organize before transitions





Schedule a weekly organization time



Create routinesand practice them of ten



Createan end-of-the-day checklist to remember materials



Keepan extra

set of books

at home and

classroom

in the

Provide brain breaks during and after instruction



Clearly explain academic& social expectations





Have students setup homework binders



www.thepathway2success.com Gibsert by Kisle Hadried

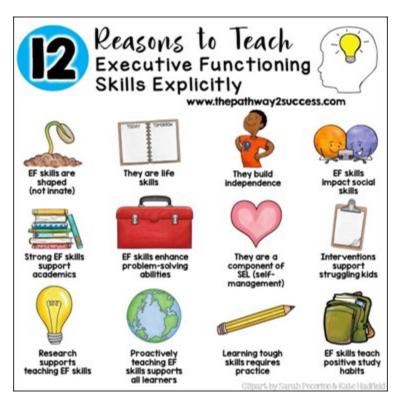




and thoughts in the moment.

• Difficulties following multiple-step instructions.

WHEN AND WHERE TO SEEK SUP-PORT



Individuals with developmental diagnosis such as Autism Spectrum Disorder or Attention Deficit/Hyperactivity Disorder (ADHD) can often experience deficits or delays in aspects of their executive functioning abilities. Although we know that these skills can also be influenced by other life experiences and interactions. Engaging with an Occupational Therapist or Psychologist may be recommended for children who experience deficits or delays in

their executive functioning skills. There are a variety of tools that can be used to explore potential deficits or delays in the development of executive functioning skills.

There are also a number of activities <u>here</u> that can easily be included in the daily routine to target executive functioning skills.

ULTIMATELY...

Individuals who experience difficulties with executive functioning skills should not be dismissed or treated unfairly. Like anyone, they possess other areas of strength and can certainly excel in many areas of life. If you have a child or student who you think may experience difficulties with executive functioning skills, it will be important to have reasonable expectations, focus on their strengths and encourage them to pursue their areas of interest. Lastly, nurturing a positive sense of self and promoting a growth mindset are further protective factors that can support anyone to thrive, despite their challenges.





Access to the Speld Qld Specialist Teacher
Database



Access Assessment services that test for learning difficulties in children and adults



Borrow from the specialist library which includes decodable readers, books & games



Attend Speld Qld workshops at a discounted member price



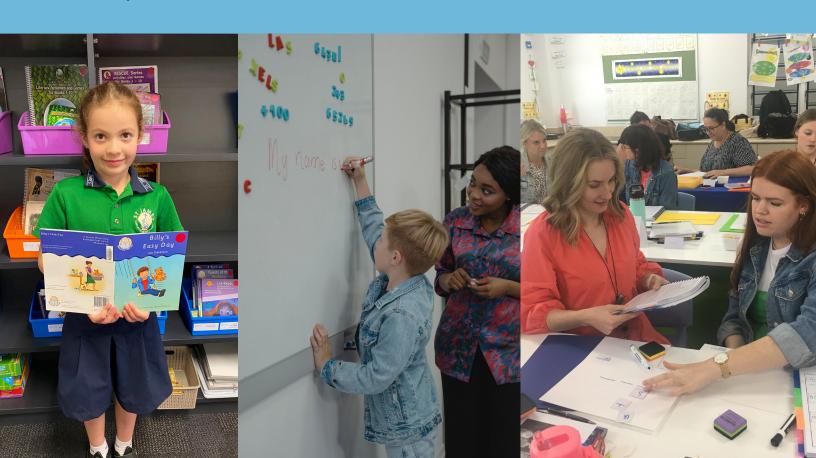
As a Financial Speld Qld member you have



exclusive access to numerous benefits

Why renew your Speld Qld Membership?

Speld Qld members can access a database of **over 50 specialist teachers** who can provide 1-1 intervention for children and adolescents with learning difficulties. Our **specialist library** contains over 120 sets of decodable readers, games and information books. Members can attend **workshops and events** including Sounds Write training and Dyslexia & Dyscalculia workshops at a discounted rate. The **Speld Qld assessment service** is available to members for psychoeducational, speech and language, academic, attentional and review assessments to understand why an individual experiences learning difficutlies. Find out the full benefits and sign up or renew membership here.



Spelling rules: Help or hinder learning to read

TO 'E' OR NOT TO 'E' — SHOULD YOU TEACH "BOSSY -E" AND OTHER SPELLING RULES?

Does your school use spelling rules to teach students about reading and spelling? Do spelling rules simplify or complicate the learning of English orthography?

Teachers traditionally have relied on spelling rules to try to help learners to memorise words for rapid retrieval. These rules have become the subject of debate as to whether they are confusing or contain too many exceptions. Consider the common spelling rule 'when two vowels go walking, the first one does the talking'. This works for boat, beat, pie, and mail, but it doesn't work for boil, steak, vein or build.

Another common rule is 'magic -e', also called 'bossy -e', 'silent -e, or even 'ninja -e'. All of these names are referring to a split vowel digraph. Watch this <u>video</u> about the magic -e rule.

Without a deep understanding of what to teach and why, teachers can only state "that's an exception to the rule". When there are too many exceptions, it can become confusing. Furthermore, students who have limited working memory or are learning English as a Second Language may find lengthy verbal explanations of rules overwhelming.

Although the English writing system is complex, it is more logical than many people think,

and a well-informed teacher who has knowledge of phonology, origins of words, the meaning of morphemes and how to combine grapheme-phoneme correspondences within a word, can explain the logic and patterns of English and help students to build efficient orthographic mapping and reduce confusion.

The critical word is patterns. Patterns represent a guide, whereas rules represent a law that cannot be violated. According to Mark Seidenberg (2017) and others, the English system is not so much rule governed as statistical — some spellings are much more common than others. The split vowel digraph merely represents a very common spelling pattern. English is full of relatively predictable patterns and Louisa Moats (2010) highlights the following statistics:

- 50% of English words are spelled accurately by sound-symbol correspondence rule alone
- 36% more are spelled with only one error
- 10% more are spelled accurately if word meaning, origin and morphology are considered
- Fewer than 4% are true oddities

Explicit instruction and repeated exposure to the targeted phonemes and patterns via carefully selected <u>phoneme-grapheme mapping</u> exercises and carefully selected word banks is essential to developing knowledge of how words are pronounced and spelled.



oi/ai spelling is used in the middle of a one syllable word		oy/ay is used at the end of a word or immediately before a suffix		-ed suffix is past to /ed/ /d/ or /t/ /ed/ /ed/ After /t/ or /d/	/d/ After voiced		is pronounced /t/ After unvoiced final phoneme
boil toil soil coin	main nail gain trail snail	toy boy ploy employed	pay day tray may saying	rented hunted lifted handed minded	sailed harm open timed	d ed ed	fished helped reached mashed flicked
When an /ɒ/ sound follows a /w/ sound, it is spelled using a		c = /k/	c = /s/ when followed by an e, i, or y			not a short el phoneme then	
was, wallet, want, wash, watch, wander		cat cup cog	cent cinema cycle fence	ridge ledge wedge lodge badge fudge judge		wage page hinge barge large gorg Haj (e e



TIPS FOR TEACHING

If all the phonemes in English could be represented by one letter, teaching of reading and spelling would be simpler. It is essential that students move beyond simple single letter grapheme-phoneme correspondences and broaden their knowledge (see Moats, 1998).

Phonemes can be represented by more than one grapheme, for example a can be represented by a, ai, ay, ea, a-e, eight and a single grapheme can represent several phonemes. For example the ea grapheme can be used for three phonemes eat, steak, bread.

Explicitly teaching grapheme-phoneme correspondences means teaching readers that some graphemes represent more than one phoneme (s/z and c/s, g/j), and a single phoneme can be represented by more than one grapheme (a, a-e, ai, ay, eigh, and so on). Students need to also understand that some graphemes choices are influenced by such things as its position in a word (oi/oy), (dge/ge), or the surrounding phonemes.

When early readers are encouraged to sound out words, they pair the sound of the word with its visual representation. This builds knowledge of grapheme-phoneme correspondences and 'legal and illegal' placement in English words. Eg; the gh in 'rough' represents the /f/ phoneme and it never appears at the beginning of a word.

Repeated exposure to the patterns of English using carefully selected <u>decodable texts</u> containing the targeted grapheme-phoneme correspondences is essential for building letter-sound skills for automatic recognition. Readers are gaining an understanding of English spelling patterns and

fine tuning these each time they are exposed to text. Learners will need to practice hearing the words, seeing the words and writing the words for them to be permanently stored or 'mapped' and ready for automatic retrieval.

The program or pedagogy that you have in place at your school will determine how you approach reading and spelling. It should allow ample practice of letter-sound associations, build phonemic awareness to an advanced level, and provide opportunities for learners to match phonemes to graphemes in words for automatic retrieval.

Grouping words into lists that have clear and logical grapho-phonological relationships allows early learners to build and internalise important knowledge of English orthography.

Knowledge of spelling conventions including the split vowel digraph are helpful for creating a 'map' between oral phonemes and the letter sequences in a word. If you choose to use a term like silent-e or magic-e, the language used should be consistent across all grades so that students aren't confused by a variety of terms and approaches.

A knowledgeable teacher can help to simplify the learning of the English code. This helps students to quickly and efficiently grasp the patterns of the language and gives them resources for self-teaching to emerge once sufficient phoneme grapheme knowledge has been learned. Some students may work these patterns out for themselves, but many will require explicit teaching to crack the code.

This article has been sourced from MultiLit <u>Five</u> From Five.



Building an understanding of Place Value

By Mandy Jak, Education Advisor

Place Value is the most important concept when teaching maths to any student. It is the foundation of every maths concept from preschool to algebra level maths and is essential for a complete mathematical understanding. Students cannot progress if they haven't mastered Place Value as a basic concept first.

WHAT IS PLACE VALUE?

Place Value is the position of a number that shows what value it is assigned, and is vital in our communication of maths as a universal language. However, when students attempt to learn this key maths concept with only a basic, abstract understanding of numbers, they continuously struggle and often give up on maths. Understanding place value is crucial for children before they can move on to addition and subtraction of 2-digit numbers. Place Value is important because it provides the foundation for regrouping, multiple-digit multiplication, and more in the decimal system. Almost all mathematical concepts build on the understanding of Place Value - making it one of the key concepts in mathematics.

PLACE VALUE: WHERE IS IT USED IN REAL LIFE?

Math is all about patterns, and our number system is based on patterns of ten. Once a child understands this, they can work with any number, including negative numbers and including decimals. Place value is involved in almost every aspect of daily life including weights, distance and time. Paying bills, reading price tags, and maintaining any kind of finances requires a clear understanding of place value. Place value helps a child understand the difference between the \$50 they received for their birthday and the \$500 price tag on the iPad they are saving for.

HOW DO YOU TEACH PLACE VALUE?

The way Place Value is taught is crucial to students ongoing understanding. Research shows that using manipulative representations of numbers is greatly beneficial in the understanding of place value. By engaging a multi-sensory awareness and experience of numbers in their proper place, students will gain a strong understanding of this basic maths concept and a knowledge of maths they can remember for life. The type of concrete material chosen and the time to introduce it is critical to the development of this concept.



CONCRETE MATERIALS COMMONLY USED FOR PLACE VALUE:

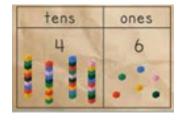
Concrete materials are key to children developing a good conceptual understanding of place value. Students need lots of opportunities, in all classes to explore and manipulate a variety of base ten materials. They need to see place value concretely, not abstractly with digits on a place value chart. So it matters which manipulatives you use. When teaching place value, you can categorise manipulatives as groupable, or non-groupable.

Groupable Materials	Non Groupable Materials
Straws/ice-cream sticks	Base 10 blocks
Unifix Cubes	Beans glued to a stick
Paper clips	Money
Counters	Place value discs

Where suitable/available, types of concrete materials should be introduced in the following order:

Groupable materials

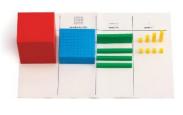
that the children can physically put together in collections of tens and physically take apart. These include ice-



cream sticks, straws, unifix cubes, ten frames and counters etc. Let students go through the motion of bundling and unbundling groups of ten or groups of one hundred. Once students know how to make a ten, the next step is to teach them to count that

ten as one unit – one ten (this is called unitizing). The idea that you can bundle 10 individual units as one is a big math idea for young students to wrap their heads around.

Grouped materials are those already pre-grouped as tens, hundreds, etc. e.g. base ten blocks and/or ten frame flash cards with



a pre-set number of dots/counters. These can't be physically taken apart or combined, instead exchanging/swapping is required.

Lastly, **non-proportional base ten materials***. These are materials that still operate on a base-ten system, but are not proportional to their value i.e. the piece that represents a ten is not ten times the size of the piece representing the unit. Examples include money and place value discs. Money in particular has the advantage that it can also be used to represent decimals i.e. 10c is one tenth and 1c is one hundredth of the unit (dollar).

*Only use these when the children already have a sound understanding and experiences with manipulating group-able and grouped materials.

PLACE VALUE MISCONCEPTIONS

If a child is struggling with place value, it usually means that they have a misconception in one or more of the following concepts.

1. Base 10 structure - for most of our number system, we read numbers in the order that we see the digits, e.g. 345 is three hundred and forty-five. However, the numbers from 11 to 19 are an



exception, and as such can present extra difficulties for struggling children. Even for a child who begins to understand the meaning of '-teen' as 'and ten', the numbers 11 and 12 are exceptions to this pattern.

- **2. Zero Learners** need to recognize 0 as a label for an empty set, or nothing, as well as a placeholder for numbers in our base-10 structure. This might seem very confusing for some children.
- **3. Partitioning** involves separating out numbers so that the value of each digit can be seen, e.g. 385 = 300 + 80 + 5. The child may denote this as 3+8+5. Here, multi digit numbers are seen as digits independent of place value, which is a misconception.
- **4. Transposition** the child misapplies the rule for reading numbers from left to right (this difficulty is often caused by teen numbers) as in 71 could be read as 17; 41 as 14.
- **5. Exchange** this is related to the value and position of each digit. Ten in any 'place' in a number can be exchanged for one in the next place to the left, so, for example, 10 hundred can be exchanged for 1 thousand. Equally, one in any 'place' can be exchanged for ten in the next place to the right. Children generally get confused about this concept and end up writing the wrong place value of a digit.

Misconceptions are a problem with understanding, not with fluency or memory

PRACTICAL SUGGESTIONS FOR PARENTS TO SUPPORT CHILDREN WITH PLACE VALUE

- Ask your child to **read out loud** any numbers they see around your home and in the wider environment, e.g. numbers on signposts, car registrations, the number of pieces in a jigsaw, page numbers on catalogues, the numbers on houses or hotel rooms, larger numbers on fact books e.g. Guinness Book of World Records, recorded times for races, etc.
- Correct language: When you are talking about numbers be careful to use the correct language e.g. for 91,856 say 'ninety one thousand, eight hundred and fifty six' not 'nine-one-eight-five-six' and for 23.95 say 'twenty three point nine five'.
- Zero does not equal 'oh'! The way we talk about numbers every day can often be mathematically incorrect or misleading. For example, when reading aloud a mobile number, that starts with 08.... we will likely say 'oh eight'..... Yet 0 is a digit called zero, whereas O or 'oh' is a letter of the alphabet and not a number at all! So, when verbalising numbers with zero, try to get into the habit of saying 'zero' instead of 'oh'.
- Numbers that end in '-teen' or '-ty' can be difficult for some children. In particular, some children can have difficulty hearing the difference between numbers ending in '-teen' and '-ty' when they are spoken out loud, e.g. 'fifty' (50) sounds like 'fifteen' (15) when spoken,



yet their values are very different. Try to say these numbers clearly, and encourage your child to say them clearly also, so that they appreciate the difference between these similar-sounding numbers.

• Make place value fun! Race to the page! Challenge your child to try to find certain page numbers, in books with plenty of pages, as quickly as they can. Use a dictionary or other reference book, or even an Ikea catalogue and call out a page number, for example 'three hundred and ninety' and see how quickly that page can be found. If you have more than one copy of a suitable big book or catalogue, two players can race against each other. Play some simple place value games using dice or playing cards e.g. Race to 100.

OTHER RESOURCES TO CONSOLIDATE UNDERSTANDING OF PLACE VALUE.

Children with learning difficulties in maths need extra opportunities to represent concepts using a variety of materials. Repeating and rehearsing each step many times may be necessary before some students can be expected to develop their understanding. Experience with handson materials helps students to understand and apply meaning to the abstract ideas of number and place value. Not all resources need to be commercially produced. Many can be easily made, using affordable everyday household items or downloaded and printed from the internet and include:

Place Value Strips/Cards/Arrow cards:

Arrow cards are a set of place value cards with

an "arrow" or point on the right side. Children organize the cards horizontally or vertically to represent numbers in expanded notation. They can overlap cards and line up the arrows to form multi-digit numbers.

Expanded notation on Polystyrene cups:

This resource is suitable for place value work from two to seven digits.



Place Value Dice will generate four-digit numbers that may be represented using Base Ten Blocks.

Spinners may be used to show the Hundreds, Tens and Ones link to Place Value.

Place Value Charts helps students to keep track of their blocks when performing calculations. They can be adapted to allow for larger numbers or include a decimal point when introducing decimal numbers.

Place Value Flip Books assist children to read and write larger numbers and see the connection between the different place values of the digits.

Number Expanders allow children to investigate the different ways numbers can be made. By folding the Number Expander in different ways they can see, that 4236 could be 4262 Ones or 42 Hundreds and 36 Ones.

Place Value Boxes dice in pill boxes can be used for students to practice saying, writing and expanding larger numbers. Two containers



can be used for students to practice adding and subtracting numbers with regrouping.

Place Value games: available to <u>purchase and download</u> from Dr Paul Swan's website. His games use 2 digits to 5 digit numbers and decimals.

When students understand the concept of place value, they'll have a strong foundation for more advanced math work, including addition with regrouping, multiplication, fractions, and decimals. Students with learning difficulties in maths struggle to develop a deep understanding of the mathematical concepts that underpin place value. It is therefore essential to provide them with early intervention using evidence-based practices, including explicit instruction, applying precise vocabulary and opportunities to work with multiple representations.

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Government of South Australia, Department for Education and Child Development Place Value – Best Advice Series 3.2: Leading Learning Improvement (September 2017)





It indy is the part-time educational program children can attend in the year prior to school. Speld Qld endorses the importance and very significant benefits of children attending Kindy in the year prior to formal schooling beginning. We support the inclusive practices that allow all children to access a quality kindergarten program. Kindy is a great opportunity for children to grow their social, emotional and early learning skills in a supportive, safe environment where all are welcome.

Approved kindergarten programs develop your child's physical, social, intellectual, language and emotional abilities.

CHILDREN WILL HAVE OPPORTUNI-TIES TO LEARN HOW TO:

- use language to communicate ideas, feelings and needs
- make friends and cooperate with other children
- become more independent and confident in their abilities

- creatively express ideas and feelings through art, dance and dramatic play
- identify, explore and solve problems
- develop reading, writing and numeracy skills.

The routine will most likely include a combination of indoor and outdoor play, group and individual activities, morning and afternoon tea, lunch break and a rest.

Your child will take part in individual and group activities such as block play, painting, games, puzzles, storytelling, dress-ups, dancing and singing.

Children can take part in outdoor physical activities and interact with the natural environment.

Through these experiences your child will build on their knowledge, explore and express new ideas, learn to cooperate with others and make friends.

For more information - check out the <u>Kindy for All website</u>.



Cognitive Load Theory in Practice: Worked Examples

Have you heard of <u>Cognitive Load Theory</u>? If you have, we're not surprised, since this theory is fast becoming one of the most important theories in education. If you haven't, don't worry - we've got loads of information and resources to get you up to scratch, including our guide to Cognitive Load Theory, which contains everything we know so far.

Essentially, Cognitive Load Theory boils down to the fact that our <u>working memory has</u> <u>limited capacity</u>. This means that if students are students are presented with too much information, the learning process will slow down because students will experience what's known as cognitive overload.

There are several really useful applications of <u>Cognitive Load Theory in the classroom</u>. For example, you may already have read our blogs on <u>The Redundancy Effect</u>, <u>The Split Attention</u> <u>Effect</u>, and <u>The Transient Information Effect</u>.

Cognitive Load Theory has also highlighted useful strategies such as <u>worked examples and completion tasks</u>. In this blog, we're going to look at worked examples, and give you some tips so you can use them effectively in your classroom.

WHAT ARE WORKED EXAMPLES?

Worked examples make use of a <u>strategy known</u> as <u>scaffolding</u>. Similar to the scaffolding used in construction, this consists of teachers using then gradually removing learning support to help students transition into independent learners.

In the case of worked examples, this means giving a step-by-step demonstration of how to complete a task or solve a problem, with each stage thoroughly explained. This gives students the strategies they need to complete similar tasks and problems that involve the same steps. So, worked examples are really the first stage of scaffolding, when the most teacher support is provided. This is great for helping novice learners or beginners with a particular concept or topic.

HOW DO WORKED EXAMPLES HELP?

This research review examined research that looked at the effectiveness of worked examples. It found that over the years, lots of research conducted in laboratories has suggested that worked examples enhance student learning. Importantly, the review also found that more recent research conducted in real life classrooms has supported the effectiveness of



worked examples too.

Research suggests that when students are given problems, often all their focus is placed on solving it, leaving little room in the working memory to remember the steps they used. Worked examples reduce this burden of information by providing the information that students need to know.

This means that while students are getting to grips with a topic, they don't have to hold all of the information in their working memory at one time, thereby reducing cognitive load, and allowing them to transfer key information into their long-term memory.

For example, if you were going to do a worked examples around the use of apostrophes for young students, it may look like this:

- He won't go there
 The girl wont go to bed
- There's a fast car Theres a party tonight
- I'd love to play with you Id hate to miss play time
- 4. I don't want to eat broccoli
 I dont want to watch TV

And likewise, if we were teaching French to older students, a worked example may look like this:

Mon père	Ma mère	Mes parents		
My father	My mother	My parents		
Ton père	Ta mère	Tes parents		
Your father	Your mother	Your parents		
Son père	? mère	? parents		
His/her father	His/her mother	His/her parents		

This is so important that Barak Rosenshine made providing models and worked examples his fourth Principle of Instruction. As he argues, if you want students to actively engage with their learning and develop an important skill, you need to show them how to do it. Worked examples help students develop a clearer understanding of what's being asked of them, and they free up working memory space, enabling students to focus more on the task at hand.

USING WORKED EXAMPLES IN THE CLASSROOM

So, worked examples are a great way to help your students learn effectively and efficiently. Here are a few practical tips for when using worked examples in your classroom:

- Clearly and thoroughly explain each step of the worked example.
- Consider giving students copies of worked examples, rather than leaving it up on a whiteboard, so that students don't have to switch



their attention back and forth (which could lead to The Split Attention Effect).

- Encourage students to explain the steps of a worked example back to you, making use of the Protégé Effect.
- Give students tasks that are very similar to the worked example, allowing them to practice and consolidate their knowledge.
- As students gain confidence with worked examples, one idea is to provide worked examples with deliberate errors in, that students must spot or explain. Research suggests that this leads to greater conceptual understanding.
- When students are confident with worked examples, move on to giving them completion tasks
- If adopting a <u>mastery learning</u> approach, where students must demonstrate a high level of understanding before moving on to a new topic, returning back to worked examples may be a good way of helping students who don't initially achieve "mastery".

FINAL THOUGHTS

Using worked examples is a simple and easy to use strategy to manage cognitive load in your classroom and enhance your students' learning. They're particularly helpful when students are 'novice learners', or beginners, in a particular subject.

To learn about more effective teaching strategies, check out our blogs on <u>Rosenshine's</u> Principles of Instruction.

This article has been sourced from Inner Drive.



VOLUNTEERS NEEDED

Help us to create a staff training module about neurodiversity



This study will investigate the strengths and challenges of neurodivergent university students.

You may be eligible to participate if:

- You have attended an Australian university within the last 5 years
- You are 18+ years of age
- You are diagnosed with autism,
 ADHD, dyslexia or another
 neurodivergent presentation <u>OR</u>
 you self-identify as neurodivergent

Benefits of the study:

Data from this study will help to inform the development of strategies to improve the educational outcomes and wellbeing of neurodivergent students.



The project is approved by the Flinders University's Human Research Ethics Committee (Project ID 5964)

Participation involves:

- Completing a short online questionnaire about your learning experiences
- Providing basic demographic information
- Providing information about the disability or learning difference that you experience

For more information



Or contact Dr Amy Wyatt amy.wyatt@flinders.edu.au













<u>UFLI Foundations Implementation Workshop</u>

Presented by Dr. Holly Lane & Dr. Valentina Contesse

Time: 9:00am - 3:30pm



<u>Dyslexia</u>

Presented by Judy Hornigold Time: 6:30pm - 8:30pm (online)



Implementing PLD in the Junior Primary

Presented by Caitlin Brandt

Time: 9:00am - 3:00pm



Implementing PLD in the Middle and Upper Primary

Presented by Caitlin Brandt

Time: 9:00am - 3:00pm



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