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Learning difficulties and homework

In this month's *TCF News* there are two articles: one about students who are experiencing language difficulties affecting their learning and the other about the current debates about homework.

Dr Julia Starling spoke recently at a TCFNSW seminar and notes of her talk are compiled by Harley Mills. They make interesting reading, especially for teachers who have experienced children with language learning difficulties. The article contains lots of practical information.

The second article looks at the current debate about homework and how teachers could respond. While not condemning homework, like research, which questions whether it has any positive effects on primary aged students, the article looks at what might be legitimate homework and how teachers might better address this issue in the wake of parent expectations and school requirements.

John Gore

Supporting the oral and written language of students with additional needs

Information provided by Dr Julia Starling, Speech and Language Pathologist, at the TCFNSW seminar in August 2016.

THE PROBLEM

Background

"Early oral language difficulties are highly correlated with later written language difficulties" according to Smart, Prior, Sanson & Oberklaid, 2001; Stothard, Bishop, Chipchase & Kaplan, 1998.

In early childhood, children learn to communicate orally, involving speech (articulation/sounds) and language (words/sentences). School-age children develop their written language from oral language. Phonological and phonemic awareness underlies development of the mastery of the speech-sound system. This in turn supports reading accuracy and spelling ability. Developing maturity of oral language supports reading comprehension and written expression. Vocabulary is needed for reading accuracy, comprehension and expression.

Communication Disorders

- a. Speech/phonology poor speech clarity and inaccurate representation of phonemes in words leads to speech sound errors; difficulty with polysyllabic words; decoding/encoding problems.
- b. Language difficulty with comprehension and expression. Poor vocabulary. Written language difficulties. Poor reading comprehension.
- c. Auditory Memory difficulty holding and manipulating information leading to cognitive overload:- can't follow instructions; forgets messages; doesn't retain new words leading to poor expressive vocabulary.
- d. Fluency stuttering hesitation impacts social communication and mental health.

Terms and Definitions

Language impairment, language difficulty, language disorder (DSM-V), language disability, SLI, receptive/expressive language impairment/disorder, language-based learning difficulties.

"A difficulty with the understanding and/or use of language in both oral and written domains*, when this impairment cannot be attributed to a primary cause such as intellectual impairment, neurological damage or sensory impairment such as hearing loss" (Leonard, 1991).

Oral language: listening comprehension, verbal expression.

Written language: reading comprehension, written expression.

Signs and symptoms of Language Impairment video from the YouTube RALLI campaign (Raising Awareness of Language Learning Impairment).

Oral and written language system according to Greathead (2012)

a. Syntax

Receptive Language - Comprehension of which grammatical structure to use and when. Expressive Language - Correct and age-appropriate use of the structural elements of language (grammar).

b. Semantics

Receptive Language - Understanding the relationship between words and what those words mean in different situations e.g. categorising. Expressive Language - The use and organisation of words and sentences (e.g. vocabulary).

c. Pragmatics

Receptive Language - The ability to understand and interpret social situations. Expressive Language - The use of language as a social tool, and for a specific purpose e.g. greetings, stating sympathy.

 d. Meta-linguistics (Using language to understand language) Receptive Language - Objective understanding of the use of language e.g. humour, figurative language, phonological awareness. Expressive Language - Ability to use metalinguistic language.

The Scale of Language Impairment

Between 7 and 16% of students are affected - 3 students per class. 40-60% of juvenile offenders have written and oral language issues. Many people have life-long language

difficulties. Affects students in all grade levels and subjects even P.E., Maths and Visual Arts. Early oral language difficulties are highly correlated with later written language difficulties. The impact of impaired language is persistent and pervasive in older children and adolescents.

Identification of Language Impairment

a. In early years:

Delayed speech and language development. First words often not until 2 years old or later; slow to develop complex sentences. Immature grammatical constructions e.g. retains irregularities longer than other children e.g. *Me goed/I went*; *mouse/mice*. Restricted vocabulary, comprehension and production. May have fine and gross motor issues.

b. School age children:

Poor oral language impacting literacy skills. Problems with phonological awareness. Continuing grammatical difficulties. Poor vocabulary development, understanding and retention. By the end of Grade 2 children, on average, know 6,000 root word meanings. With estimates of 70% of English words having at least 2 meanings. Grades 3 to 6 add 1000 words per year. Slow rate of processing oral and written language. Poor auditory working memory, retention and acting on information. May be experiencing poor social verbal interaction.

c. Older children and adolescents:

Poor higher order skills, literal interpretations, difficulty with analytical thinking and abstract language. Falling behind in increasingly demanding language environments. Reading comprehension and writing often become major issues. Mental health problems, pragmatic issues, withdrawal behaviour, acting out and being distracted.

ACTION

Creating the language-friendly classroom

- Reduce the complexity of teacher language both oral and written vocabulary, sentence length, number of instructions, use explicit language rather than implied, beware of the possibility of literal interpretations.
- Make a plan to sequence the introduction of new ideas and explain the links to other concepts.
- Chunk information into small meaningful sections.
- Increase opportunities for repetition and rehearsal, checking for understanding.
- Provide written information that students can process by themselves independence tools.
- Prioritise essential curriculum vocabulary with descriptions that are relevant and use-able.
- Increase visual supports with spoken language provide written and pictorial summaries of oral presentations. Provide summary notes. Use visual aids, demonstrations, concept maps, time lines.
- Reduce the speed of delivery, increasing the time for processing and production. (Allow 5 seconds of wait time for kids to think before answering questions.)
- Teach phonics systematically and meaningfully Spelfabet.com (Alison Clark).
- Specifically teach vocabulary. Teach up to 10 keywords for a topic, mostly Tier 2 words. Revisit them up to 12 times. Have the class come up with definitions of word meanings rather than just copy them from a reference source.
- Follow Robert Maranzo's six steps for direct vocabulary instruction.

Vocabulary

Each new curriculum topic for all subject areas involves the introduction of a set of vocabulary items and terminologies which must be processed and retained in order to develop even the most rudimentary knowledge and application of that topic. (Beck 2002) Meaning may

be stated once and supplied on a glossary sheet that is difficult to interpret. Meanings often copied out verbatim from dictionaries, with no "real" understanding extracted.

Direct Vocabulary Instruction - Beck, McKeown & Kucan (2013): Bringing Words to Life.

- Tier 1: The most everyday, basic and familiar words in our vocabulary that rarely need direct instruction. e.g. clock, baby, happy, face, sky.
- Tier 2: Words that are of high utility for language users but that often need to be directly taught. They are of high frequency use and are often found across a variety of domains. e.g. coincidence, absurd, industrious, fortunate, cultural.
- Tier 3: Words that are of low frequency use, or that apply to specific domains. They may be essential to learning a topic. e.g. Isotope, lathe, peninsula, metamorphosis.

Prioritising words for vocabulary instruction -

- "Must know" words: essential to learning a topic or concept. These words should be directly and systematically taught.
- "Should know" words: Highly significant, although not essential to understanding the topic or concept.
- "Could know" words: Interesting and stimulating though not necessary for a basic understanding of a topic.

Robust Word knowledge -

- Can define the word in a generalised way.
- Not dependent on context.
- Can apply the word in appropriate situations.
- Breadth and depth: knowledge of multiple meanings for a word; metaphorical use; range of derivatives.
- Can readily retrieve the word, with well-mapped semantic connections and phonological specifications. (Student can read the word, say it, spell it, know what it means and use it appropriately.)

Class Resources

- "The Learners Dictionary" Colins' Co-Builder Series
- When using the internet have kids add "for kids" to their word searches.
- Simple English Wikipedia: https://simple.wikipedia.org/wiki
- *Rewordify* uses a computer to turn text into plain English: https://rewordify.com

Notes by Harley Mills

Homework

Homework is a major issue in education due to the conflicting interests and demands of those involved - students, teachers and parents. Some parents demand more while others dread it. Some teachers give large amounts while others give little. Some students feel more secure with regular homework while others don't want more school at home. As Christians, do we have a view about homework? Is there any Biblical guidance?

The demand for homework.

Schools have a long tradition of giving homework. Historically, both primary and secondary schools have provided homework in the form of completion, additional and assignment work. The arguments are that class work needs reinforcement and that the curriculum is crowded requiring some work to be done as homework. In addition, research and summary skills are considered important and able to be developed further through homework.

Parents remember their schools days and homework was part of them. They think that it helped them so it will help their children. They may have forgotten their struggles, and at times the resentment of their parents, and now believe that homework will help their children succeed. After all, it didn't harm them did it? As a consequence, it is often parents who drive the demand for homework as they want their children to be competitive and to get ahead or, at least, not fall behind.

Teachers are usually under pressure from their school and parents to provide regular homework. Teacher beliefs about homework effectiveness are diverse. More needs to be said about the nature and type of homework. Nonetheless, teachers feel the pressure from parents and school policy to give homework and is often the making of inappropriate tasks.

Even students bring their own demands for homework. Students can believe that subjects with no homework are lesser subjects and be insecure about their performance in them. Their perceptions about subject hierarchy are sometimes guided by the amount of homework demanded.

So homework has a lot of supporters who believe that more learning occurs, more skills are developed and that good learning habits are promoted through homework.

What does the research say?

A recent review and inquiry was reported in <u>Inquiry into the approaches to homework in</u> <u>Victorian schools</u>. After conducting its own literature review, receiving 32 submissions and hearing from 16 expert witnesses during three days of public hearings, the inquiry committee had this to say: It is not possible from the available data to make unequivocal statements about the effectiveness of homework overall in assisting student learning. It goes on to say that there is almost no evidence of homework leading to improved academic performance in primary schools and in secondary schools the findings are mixed.

These findings are echoed in the NSW Department of Education Homework Policy Guidelines which say There is little consensus in the literature as to whether homework raises student achievement. Most researchers, however, conclude that for primary students, there is no evidence that homework lifts academic performance. (P.3)

A host of overseas research concludes similarly, but some have positive findings for certain types of homework in secondary schools. These will be investigated below.

The more immediate issue is to recognise the pressure parents put on schools for homework and the compliance of schools to their community's expectations that results in homework continuing to be an integral part of both primary and secondary schools in all school sectors. Of course, there are still many teachers who, irrespective of the research, believe in the effectiveness of homework and are willing meet these expectations.

What happens in other countries and Australia?

In secondary schools, Russia, Singapore, Kazakhstan, Italy and Ireland head the list of homework hours per week within OECD countries. (There is evidence for Shanghai that would place it at the top but it is an unrepresentative subset of China.) At the other end is Finland, South Korea, Czech Republic, Slovak Republic and Liechtenstein.

These figures are misleading and as discussed in the last *TCF News, Leaning tower of PISA* article for example, a South Korean secondary student's life is taken up by extra tuition and individual study which when taken into account in the above figures would place South Korea

near the top of any list of after school homework-study-tuition. However, Finland is probably about right and we know that is has an enviable schooling system. Australia is at the higher end 16/65.

It is reported that those with more homework are more likely to perform better at the PISA (*Program for International Student Assessment*) tests but there is not a high correlation.

In some primary schools there is a desire to reduce homework, but schools that have eliminated it faced parent backlashes. A public school for primary-aged children in New York has decided to end all homework assignments, but angry parents have responded by threatening to pull their kids out of the school. (UK Telegraph 24/8/2016) There are other examples of primary schools that have eliminated or severely reduced homework including in Australia, but it is hard to document any widespread trend and state departments of education polices leave it to schools to establish a homework policy in conjunction with their community.

While there continues to be a successfully argued link between international test scores and homework, secondary students cannot expect any relief soon from the burden of homework but some primary schools are still working on a reduction while fighting parent expectations and teacher beliefs.

Key issues

1. Variations in student maturity

Setting homework, especially in primary schools, is usually on a whole class basis. However, students are at varying levels of readiness. Not only is there the difference between boys and girls of the same primary school age, but also the different backgrounds of students. Some come to school reading while others take one or two years to gain this skill and, until they have it, most homework is incomprehensible.

Early childhood teachers have a huge responsibility to identify students with learning difficulties that affect them in every aspect of schooling leaving them behind the class average from day one. Any homework for these students will have to be directed at their deficiencies and not simply part of a regular set of exercises to do more of the same class work.

2. Parent expectations and support

Schools find themselves fighting the weight of parent expectations. Parents want their children to do well and see the whole schooling system as competitive. They want to make sure their children are making progress and staying ahead. When homework is not given regularly, parents became uneasy and want to know what the rationale is for the perceived lack of homework. Teachers face an uphill battle with these parents and often give in and provide regular homework which repeats what is done in class. But there are some parents who hate homework and feel inadequate to deal with their child's questions. It is these conflicting opinions that force schools to have a homework policy and for each teacher to comply whether they want to give homework or not. While this may work well in secondary schools, the bottom line is that in most primary schools more homework is given than teachers or students want.

3. Amount

Having raised the research results that homework does not raise the academic performance of students, the question of how much homework seems unnecessary. Yet, some schools persist in large amounts of homework, which for struggling students, means

a lot more out of school time to reach completion, while successful and bright students complete it quickly.

Associated with the amount of homework is the time given for completion. In secondary schools, where students can have around eight different teachers, there is a real issue for them and for the school about managing the amount of homework and due dates. Students who have after school activities, including part time work, can be caught when short timelines are given for time demanding homework. The inconsistent and unpredictable nature of the amount of homework can be a serious problem for secondary students especially in the senior years where the NSW Board of Studies recently, in recognition of these issues, reduced the assessment demands for HSC courses.

4. The type of homework

A fundamental question about homework is its nature. Just what are students being asked to do and is it of much educational benefit?

There are some good arguments for homework:

- 1. Completion making sure work started in class is completed. Not every student is able to complete the work given that day while at school and making completion homework is a worthy case. Many students can reach learning outcomes and they just need some extra time.
- 2. Rehearsal some learning needs to be cemented into the brain by rehearsal, including early learning with numbers, letters and phonics. Homework in these areas for young children can be important in their development to ensure that they don't fall behind.
- 3. Practice music and sport need as much practice as possible to refine skills and there are some other learning practices, including writing, that can help young students.
- 4. Learning skills development students need to practice learning skills like summarising so that they can identify important parts of a text and bring large volumes of written material down to something manageable for examination purposes.
- 5. Research being able to access information effectively when viewing a variety of sources and being able to identify what is important is an essential skill for higher learning. Some practice of these skills is needed in primary and secondary schools and is usually achieved through homework assignments.

So, there are some valid and purposeful reasons for giving homework, but a lot of what is given by teachers would be difficult to fit into these valid reasons. Homework for the sake of homework or to meet a school policy, trying to make your subject more important than others, satisfying unrealistic parent expectations, punishment, making up for being behind in the program are all poor excuses for homework.

5. Marking and feedback

The old argument is true - there is no point giving homework unless you check its completion. If for an educational purpose, then it is incumbent on the teacher to check its completion and quality. In many cases this might place an additional marking burden on the teacher (another reason to be careful about giving homework), but it may just mean a quick check with students holding their work up under their chins or sampling the students to give answers or provide a verbal response.

If a teacher does not consistently check homework and mark it where necessary, then students soon get to know what is important and what they should or should not bother

doing. Providing valid homework and checking it, will assist all students to achieve their learning outcomes.

A Christian perspective

As Christians, our focus is always on the needs of individual students. We want what is best for them in their learning so that they can know God better through his creation, through knowledge including Biblical knowledge and through relationships with others. Above all we want them to know Jesus as Lord. In this context, homework plays a role in expanding the knowledge and learning of students. It can help them to be more confident learners who can seek the truth and find God not only in creation, knowledge and other people but through faith as they increasingly put their trust in him. But homework that does not constitute effective learnings is not Christian because it is neither loving, nor in the best interest of the students, and therefore to be avoided.

In conclusion, for Australian schools, homework will remain a feature of both primary and secondary schools because of pressure from parents and school administrators, but also because most teachers believe that it is useful for learning. Perhaps more attention to the literature on homework effectiveness, a more complicit approach to what constitutes valid homework and more attention to checking completion and quality would see students getting less, but more effective, homework to improve their learning and knowing how God cares for them.

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