

## **Evidence Based Interventions- By Karen Starkiss- Dyslexia Assessment and Support Services**

Schools and parents of children with learning difficulties will want to educate yourselves about the best support programs for all children and those with LD. When you search on the internet or join a support group you will hear 'Evidence Based Interventions' mentioned time and time again. But what does this mean?

Whatever intervention the school uses, the programs, curricula, and practices based on "scientifically-based research" This means that whenever possible, the educational interventions being used must be strongly supported by evidence from well-conducted research studies. Educational research may be said to be scientific when it:

- Uses a sound research design. The outcomes of students receiving a tested teaching strategy or intervention are compared to similar students who do not receive the intervention.
- Is based on high quality data analysis. Researchers must be sure to carefully collect, store and examine the data.
- Involves other researchers to review the results. The study should be reported in an independent, peer reviewed journal so other researchers can review the methods used and repeat the research in other settings.

These research-based practices should then be matched with a student's unique needs and skills especially when developing a student's Individualised Learning Program (ILP).

### **But what about the Evidence Based Teaching?**

There is a lot of information provided about 'evidence based interventions' however, there is far less information provided to parents about 'Evidence based teaching strategies'

This is as important, if not more important than knowing a school is using an evidence based program as an intervention for reading, for example.

Professor John Hattie's work is internationally acclaimed. His 2008 book 'Visible Learning: A synthesis of over 800 Meta-Analyses Relating to Achievement' is believed to be the world's largest evidence-based study into the factors which improve student learning. Involving more than 80 million students from around the world and bringing together 50,000 smaller studies, the study found positive teacher-student interaction is the most important factor in effective teaching.

Hattie found that most teachers have some degree of impact on their students' learning. However, some teachers have far more impact than others. He discovered that teachers are far more likely to have a large and positive impact if they:

- Are passionate about helping their students learn
- Forge strong relationships with their students
- Are clear about what they want their students to learn
- Adopt evidence-based teaching strategies
- Monitor their impact on students' learning, and adjust their approaches accordingly
- Actively seek to improve their own teaching

According to John Hattie's research, high-impact, evidence-based teaching strategies include:

- Direct Instruction

- Note Taking & Other Study Skills
- Spaced Practice
- Feedback
- Teaching Metacognitive Skills
- Teaching Problem Solving Skills
- Reciprocal Teaching
- Mastery Learning
- Concept Mapping
- Worked Examples

John Hattie found that students achieve better results when they are taught:

- Core and subject-specific vocabulary
- Phonics and phonemic awareness
- Comprehension skills

Other programs that have a significant, positive impact on student performance include:

- Creativity Programs
- Repeated Reading Programs
- Visual Perception Programs

### **Choosing an Evidence Based Program to use at Home or from a Professional**

When looking for programs to choose there are many 'All Singing, All Dancing' programs cleverly marketed towards parents who desperately want to help their child, so parents beware.

Be cautious about interventions and programmes that are supported only by glowing 'testimonials'. Read all research with a critical eye and look for rigorous standards in data collection. Be wary too, if the research evidence has only been produced by the company or organisation selling the product.

**There are many evidence-based programs available including 'Synthetic Phonic' programs. In these children will:**

- start by learning about the sounds within spoken words.
- hear that sentences are made up of words
- Know that some words rhyme; that some words start (or finish) with the same sound
- Be taught to isolate and segment sounds and break them into syllables
- The programs basically teach the same sounds; the exact order is not too important; many introduce the sounds along the lines of Jolly Phonics
- Generally initial sounds come first including short vowels then long vowels, digraphs, r controlled vowel sounds
- But from the start students are blending or synthesising sounds to make words.
- Students in upper primary or in secondary might be learning about complex spelling patterns, morphology and vocabulary
- practice their skills using decodable readers such as the 'Dandelion Readers' (these cover older children with lower reading ages) or 'Little Learners Love Literacy Readers' where they can be successful and not expected to guess or use pictures cues.

Ref:

The Australian Society for Evidence based Teaching  
National Educational Psychology Service  
The Centre for Independent Studies