

How does research validate implementation protocols?

Good, comprehensive research explores: “**under what conditions does something work?**”

Once research has established something works in one way, then other researchers explore how else, or with what else, it might work. Sometimes research outcomes aren't as “positive” as researchers hypothesised. Validated implementation protocols reflect the knowledge base that research has proven works. **Hence, if a non-validated protocol is used, it may not give the same outcome as successfully proven with recommended protocols.**

As a case in point, of the more than 200 published studies, most Fast ForWord detractors selectively cite the meta-analysis done by Strong et al (2010) and refer to the abstract without contemplating the implementation protocol in the research studies selected. Always consider: “**Was the product used with research-validated protocols?**”

Strong et al acknowledge **they found 79 unique studies on Fast ForWord**. The large number of research papers testifies to the success of Fast ForWord – it's hard to win multiple grants to fund research if Fast ForWord wasn't producing positive results for students.

Using very restrictive inclusion criteria, Strong et al **excluded over 90% of the research** and conducted the meta-analysis using just 5 papers. **The meta-analysis did not consider whether protocols used were validated, nor whether participants completed Fast ForWord (FFW)** or merely attempted the program. These selection choices significantly bias the results of the meta-analysis.

However, within the chosen papers, many interesting results were ignored in the meta-analysis:

- a) Gillam et al, 2008, conducted a RCT with 216 children with verified language impairments using 4 interventions and reported: “The children in all four arms **improved significantly on a global language test**”; on the metrics used for the meta-analysis, **50 hours of Fast ForWord is as effective as 50 hours of 1-on-1 instruction with a certified and licenced Speech-Language Pathologist (ILI)** [This infers Fast ForWord use can help large numbers of students at significantly lower cost than 1-on-1 intervention]; and participants using FFW “earned **higher phonological awareness** scores than children in the ILI arm at the six-month follow-up testing”.
- b) In two studies (Borman et al., 2009; Rouse & Krueger, 2004), the researchers acknowledged their implementation problems and conducted additional analyses to examine the relationship between Fast ForWord product use and reading gains. **Both groups found greater impacts on reading scores among students who had better product use**. For example, Borman et al. found a **statistically significant effect of program completion on reading comprehension**; completing the program had a moderate to large impact on reading comprehension (effect size of $d = 0.50$).
- c) In the Cohen et al, 2005 study, students participated at home and there was considerable variability in their Fast ForWord usage – student use ranged from 7 to 42 days [not many completed]. Using an “intent to treat” model, the data from all students (including those that did not complete) was included in the analysis and **estimates were used in cases of missing** scores.
- d) Pokorni et al, 2004 acknowledge they **did not use a validated protocol**:

The results of the reports used in this meta-analysis and from over 200 other published peer-reviewed research papers on the effectiveness of Fast ForWord show that:

If you COMPLETE the neuroscience-based exercises of Fast ForWord (not just start them)
IN ACCORDANCE with the scientifically validated protocols (not just doing what you feel like),
then statistically significant gains can be achieved.

Further, separate to the above study, **a multi-year longitudinal study of several thousand students using Fast ForWord** showed the other advantage of these training-the-brain exercises for improving cognitive, English language and reading skills is **the transference of benefits and gains to other subjects**. This is shown by this group of 23 schools which over 10 years moved from the bottom quartile to the top in state-wide standardised testing of all 4 subject domains - **Math, Science, English Literacy Arts & Social Studies** – as teachers gained implementation experience.

Click here for graphs and a [3-minute video summary of St Mary's Parish school data](#)

The **2021 4th generation of Fast ForWord**, incorporates the best learning from over 200 published research papers, several hundred school case studies and the data insights from over 3 million users across 50 countries. **It works.**