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HOW TO MAKE EVIDENCE-BASED DECISIONS ABOUT TREATMENTS FOR POOR READERS

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Outline



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Believe in the evidence and not anecdotes (ie how bad it can get)

Inspiration by evidence-based champions (ie it's getting lonely out here)

How to make evidence-based decisions about treatment for poor readers (ie a step-by-step guide)

Examples (ie hammering it home)





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BELIEVE IN EVIDENCE - NOT ANECDOTES

How bad it can get

“INSTINCTIVE CORRECTNESS”

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Flossing

ANECDOTES



Home > Teeth > 6 Reasons why Flossing is so important

6 Reasons why Flossing is so important

written by Amanda Kahler, November 8th, 2008

Why is flossing so important and why should everyone floss even when you've had a hard day at work, and that you have your teeth before going to sleep, why give that extra effort to do necessary?

Here's something interesting to consider: your mouth is a door! Everything that constitutes your body has come in from your mouth: food, liquids or bacteria. Bad and harmful bacteria, which are dental plaque, cannot be removed only by brushing alone, and your mouth, it can find its way into your body!



5 Reasons Why Flossing is Extremely Important

by Matt Cunningham

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Every time you visit the dentist for a checkup, there's one question you're almost certain to hear: "Have you been flossing regularly?" For a lot of patients, the answer isn't always yes. Many people make a point of brushing their teeth twice a day, as the American Dental Association (ADA) recommends, but fewer people follow the recommendation to floss at least once a day (source: ADA).

What many of these non-flossers don't realize is that this step plays an important role in dental health. Unlike a toothbrush, which cleans the top and outer surfaces of the teeth and gums, floss is an interdental cleaner—it's designed specifically to clean the tight spaces between the teeth and the gums. These are places where antibacterial mouthwash can't remove the stubborn stuff these places (source: ADA).

Flossing More Important Than Brushing, Dentists Say

84 people like this. Be the first of your friends.

is like Mitt Romney - it has an image problem it can't seem to

be dentist the other day and we end up talking about it. I had to choose. It was hard, but he finally admitted it. In fact, the dental office agreed.

is more important, but nobody wants to tell you.

I want to tell you because they think you'll stop brushing, so no be courage to tell you **flossing is better and results in less**

r if this

rushing, ce.

DELTA DENTAL

Oral Health Tips

Emergency Care
Kids and Teens
Cosmetics
Nutrition
Month-to-Month
Preventive Care
Cosmetics
Dental Treatments

Facts about flossing

How important is flossing? According to the Academy of General Dentistry (AGD), flossing is the single most important aspect of oral care.

Floss removes plaque and debris that sticks to teeth and gums in places that brushing can't reach. It also helps prevent gum disease, tooth decay, and bad breath. Flossing your teeth daily can increase the chance of keeping them for a lifetime and decrease the chance of getting gum disease.

Most people like the idea of flossing as a way to keep their teeth healthy. However, the AGD says flossing even once or twice a week has been shown to be better than not flossing at all.

The Truth About Healthy Teeth: Your Guide

Flossing Teeth for Dummies: No More Excuses!

People have all sorts of excuses for not flossing their teeth. But dentists say there are easy ways to floss that address every excuse.

By David Freeman
Reviewed By Brunilda Nazario, MD

Do you floss? Or, like many people, do you always seem to find a reason not to?

A 2008 survey found that only 48% of Americans floss daily, and 10% never floss. That's most unfortunate, dentists say, because flossing is even more important than brushing when it comes to preventing periodontal (gum) disease and tooth loss.

"If you were stuck on a desert island and a boat could bring only one thing, you'd want it to bring floss," says Samuel L. Lo, DDS, professor of periodontology at the University of Florida College of Dentistry in Gainesville and president of the American Academy of Periodontology. "But I'm convinced that the only time some of my patients floss is an hour before showing up in my office."

Flossing

EVIDENCE



Flossing to reduce gum disease and tooth decay

Sambunjak D, Nickerson JW, Poklepovic T, Johnson TM, Imai P, Tugwell P, Worthington HV

Published Online: April 18, 2012

It is assumed that removing plaque (a layer of bacteria in an organic matrix which forms on the teeth) will help prevent gum disease (gingivitis) and tooth decay (dental caries). Gum disease, which appears as red, bleeding gums, may eventually contribute to tooth loss. Untreated tooth decay may also result in tooth loss. Toothbrushing removes some plaque, but cannot reach in-between the teeth, where gum disease and tooth decay are common. This review looks at the added benefit of dental flossing, in people who brush their teeth regularly, for preventing gum disease and tooth decay.

Twelve trials were included in this review which reported data on two outcomes (dental plaque and gum disease). Trials were of poor quality and conclusions must be viewed as unreliable. The review showed that people who brush and floss regularly have less gum bleeding compared to toothbrushing alone. There was weak, very unreliable evidence of a possible small reduction in plaque. There was no information on other measurements such as tooth decay because the trials were not long enough and detecting early stage decay between teeth is difficult.



Ben Goldacre

IMPORTANCE OF EVIDENCE IN GENERAL



<https://www.youtube.com/watch?v=h4MhbkWJzKk>

Ben Goldacre

IMPORTANCE OF EVIDENCE IN EDUCATION



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<https://www.youtube.com/watch?v=nui3ywIVP9I>

Dorothy Bishop

IMPORTANCE OF EVIDENCE FOR POOR READERS



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<https://www.youtube.com/watch?v=2tBX-lRE2FI>



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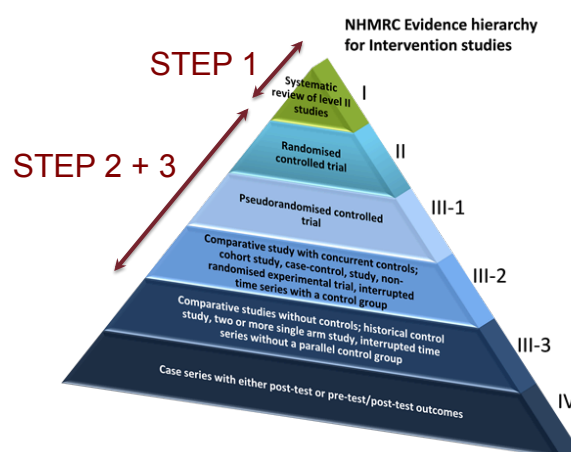
HOW TO MAKE EVIDENCE-BASED DECISIONS ABOUT TREATMENTS FOR POOR READERS

Not all scientific evidence is equal

EVIDENCE PYRAMID



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Step 1: Find a systematic review



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A review of controlled trials of a treatment in poor readers

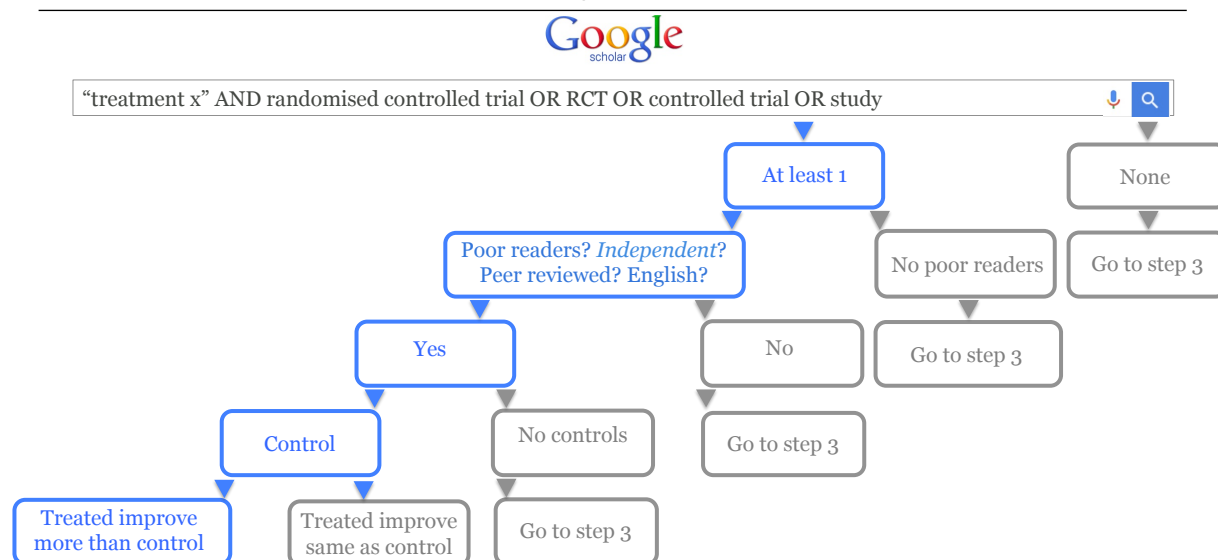


Step 2: DIY systematic review



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DIY review of controlled trials of a treatment in poor readers

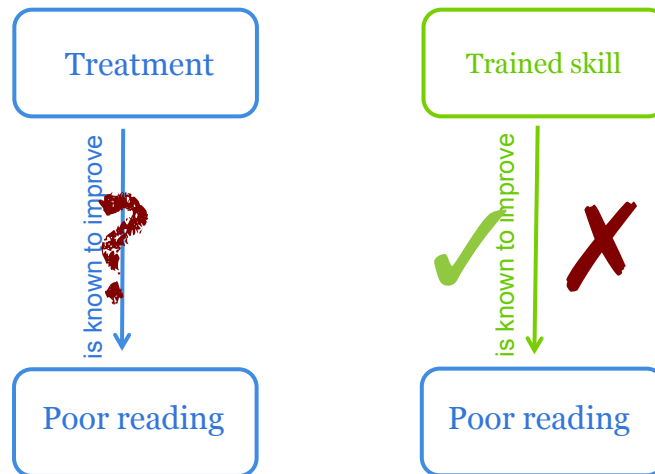


Step 3: Use indirect evidence



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DIY review of controlled trials of what a treatment claims to train in poor readers



Step 3a: Find out what a treatment claims to train



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"treatment x"



Step 3b: Find out if that training improves poor reading



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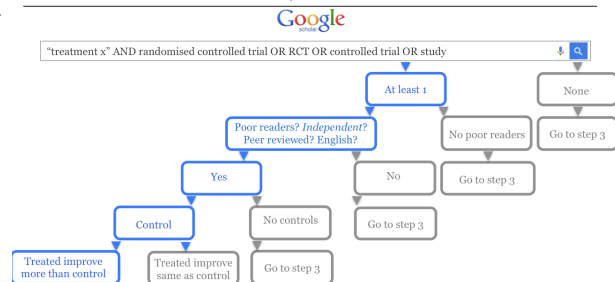
Step 1: Find a systematic review

A review of controlled trials of a treatment in poor readers



Step 2: DIY systematic review

DIY review of controlled trials of a treatment in poor readers

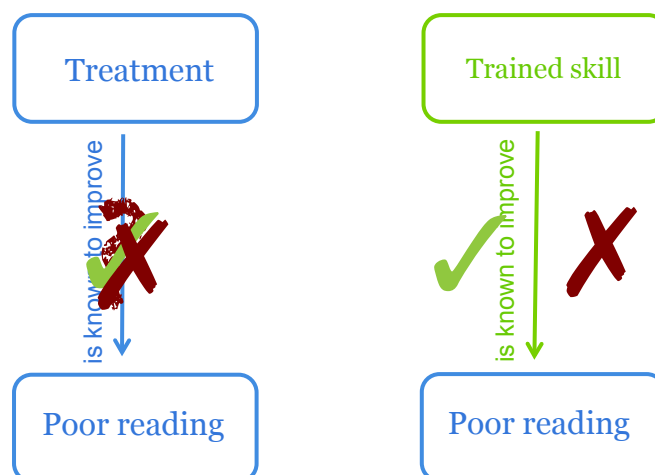


Step 3: Use indirect evidence

DIY review of controlled trials of what a treatment claims to train in poor readers



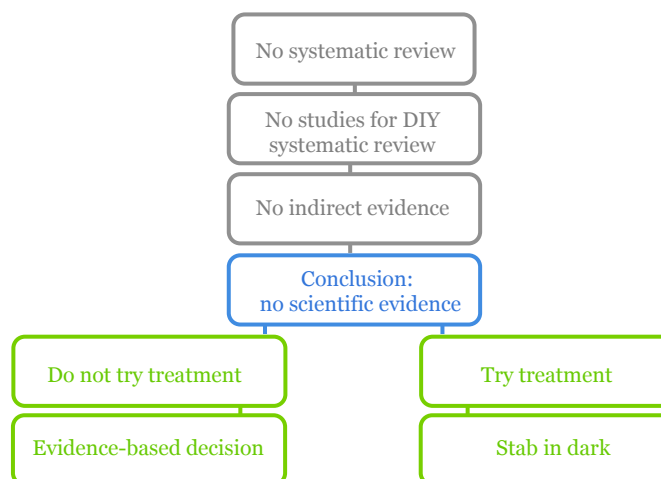
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Step 4: Strike out



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Beware of the brain



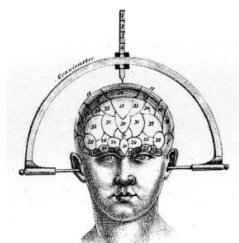
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Brain data cannot tell us if an educational treatment works or not

If a program did not improve language, but did change the brain, would you buy it?

If a program did improve language, but did not change the brain, would you not buy it?

Focus on the behaviour (i.e., speaking, understanding) and not the brain



Beware of the anecdote



Biased

Subjective

Confounded by other factors (e.g., treatments)

Cognitive dissonance



EXAMPLES (IE HAMMERING IT HOME)

Distal and proximal treatments of poor reading



Distal (indirect) treatments



Proximal (direct) treatments



FAST FORWARD (STEP 1)

Fast ForWord



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“... develops the cognitive skills that enhance learning”

The Fast ForWord Program

The Fast ForWord program is a learning acceleration software based on over 30 years of neuroscience research, designed for education institutions, English language learning centers, and clinical specialists worldwide.

The Fast ForWord program develops the cognitive skills that enhance learning. The strengthening of these skills results in a wide range of improved critical language and reading skills such as phonological awareness, phonemic awareness, fluency, vocabulary, comprehension, decoding, working memory, syntax, grammar, and other skills necessary to learn how to read or to become a better reader.

For your English Language learners, the Fast ForWord program builds a strong cognitive academic language foundation. Learners experience rapid improvements in English language and literacy skills, including the essential skill of reading for meaning.

Participants work on the Fast ForWord program 3 – 5 days a week for approximately 8 – 12 weeks. In studies, students have experienced gains in reading skills averaging 1 – 2 years.

Just as a body runs better and quicker when fit, brains learn better after consistent use with the Fast ForWord exercises. The key is processing efficiency, and students around the globe, regardless of native language, are using the Fast ForWord program to develop the cognitive skills that enhance **learning, leading to academic success.**

[Request information](#) about Scientific Learning products.



See learning

skills take off!

View Fast ForWord program results

Featured Partner

Voders English

A new reseller in Turkey
has explosive growth



Step 1: Find a systematic review

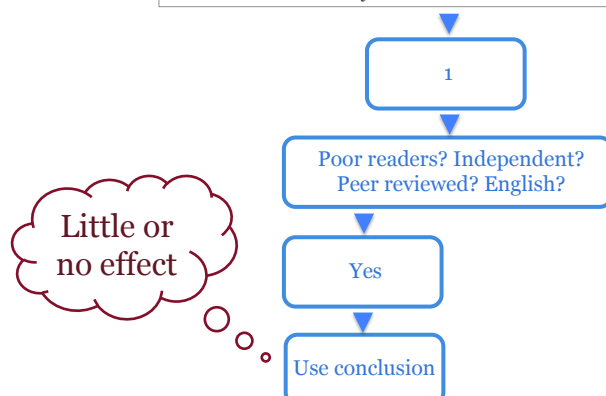


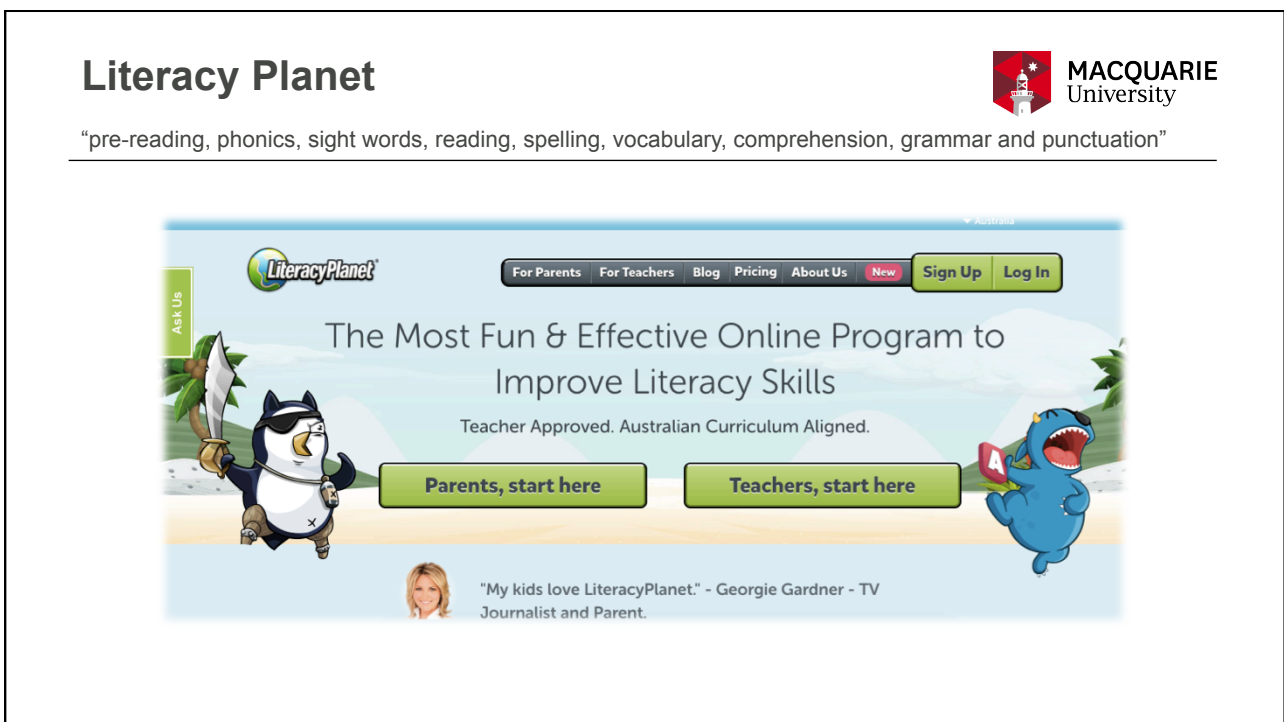
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A review of controlled trials of Fast ForWord in poor readers



Fast ForWord AND systematic review OR meta analysis OR review





Step 1: Find a systematic review



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A review of controlled trials of Literacy Planet in poor readers



Literacy planet AND systematic review OR meta analysis OR review



None

Go to step 2

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Step 2: DIY systematic review



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DIY review of controlled trials of Literacy Planet in poor readers



Literacy Planet AND randomised controlled trial OR RCT OR controlled trial OR study



1

Poor readers? *Independent?*
Peer reviewed? English?

Yes

Control

Treated improve
more than control

Significant effects
on some reading
tests



Jungle Memory

“... trains Working Memory ... use this skill in ... Reading, Writing, and Math”

Train your child's brain!

[Contact Us](#)
[Frequently Asked Questions](#)
[Login](#)

[START NOW!](#)
[Who it Helps](#)
[How it Works](#)
[What You Get](#)

"I am thrilled at Jasmine's meteoric improvements! I can only attribute them to Jungle Memory."

Emma, Mother and Teacher

NEY ACK
Working Memory

[More Testimonials](#)

WORKING MEMORY MATTERS

Step 1: Find a systematic review



A review of controlled trials of Jungle Memory in poor readers



Jungle Memory AND systematic review OR meta analysis OR review



None

Go to step 2

33

Step 2: DIY systematic review



Your own review of controlled trials of Jungle Memory in poor readers



Jungle Memory AND randomised controlled trial OR RCT OR controlled trial OR study



None

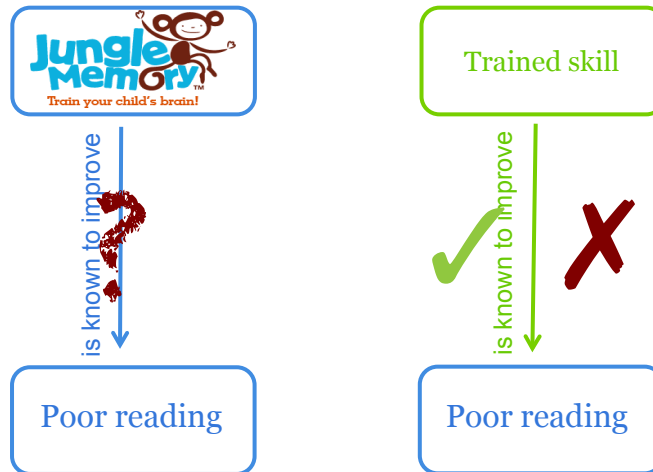
Go to step 3

Step 3: Use indirect evidence



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DIY review of controlled trials of what Jungle Memory claims to train in poor readers



Step 3a: Find out what a treatment claims to train



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"Jungle Memory"



Step 3b: Find out if that training improves poor reading



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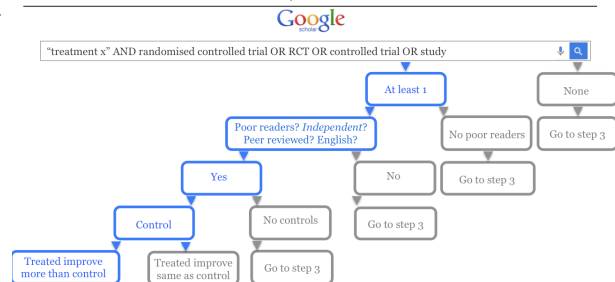
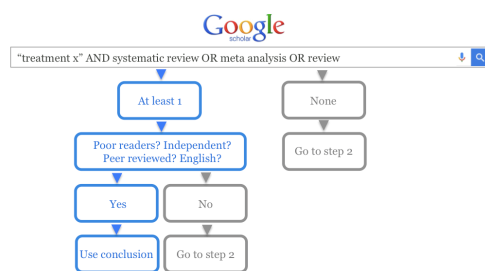
Step 1: Find a systematic review

A review of controlled trials of a treatment in poor readers



Step 2: DIY systematic review

DIY review of controlled trials of a treatment in poor readers

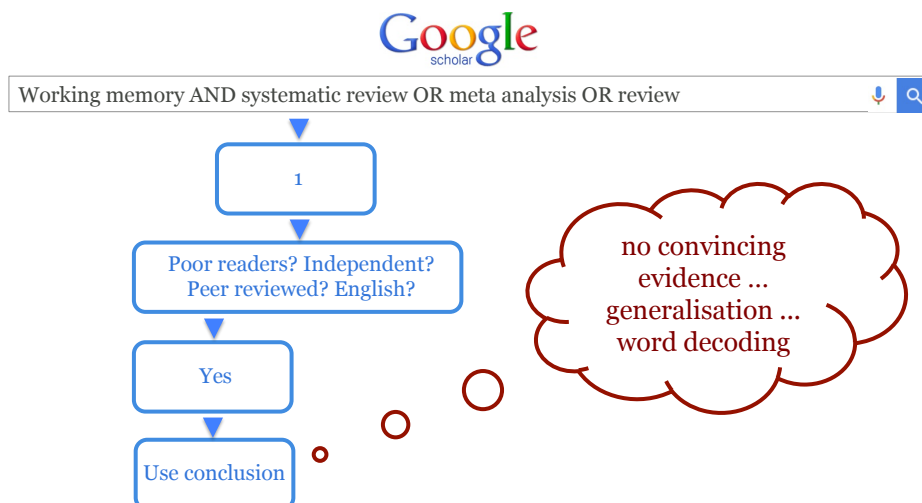


Step 1: Find a systematic review

A review of controlled trials of working memory in poor readers



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Step 3: Use indirect evidence



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DIY review of controlled trials of what a Jungle Memory claims to train in poor readers



is known to improve



Poor reading

Trained skill

Working
memory

is known to improve



Poor reading



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ARROWSMITH (STEP 4)

Arrowsmith

“strengthen the underlying weak cognitive capacities”



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Arrowsmith PROGRAM
Strengthening Learning Capacities*

Home | About Us | Implementation Guidelines | Information Brochures | FAQs | Advocacy Guidelines | Employment | Newsletters | Contact

About Us > Introduction

Welcome to the website for the Arrowsmith Program

Arrowsmith Program refers both to the Arrowsmith Program methodology and also to our affiliated organizations that make the Arrowsmith Program available to public and private schools in Canada, United States, Australia, New Zealand, Thailand, South Korea and Malaysia.

The Arrowsmith Program is based on the philosophy that it is possible to address specific learning difficulties by identifying and strengthening weak cognitive capacities.

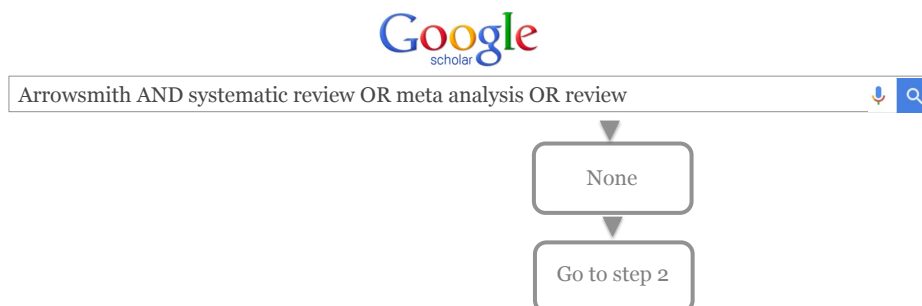
The goal of the Arrowsmith Program's intensive and graduated cognitive exercises is to strengthen a range of weak cognitive capacities that are hypothesized to underlie a number of specific learning difficulties. Each student's program is based on a careful assessment of their individual strengths and weaknesses.

Step 1: Find a systematic review

A review of controlled trials of Arrowsmith in poor readers



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Step 2: DIY systematic review



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Your own review of controlled trials of Arrowsmith in poor readers



Arrowsmith AND randomised controlled trial OR RCT OR controlled trial OR study



None

Go to step 3

Step 3: Use indirect evidence



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DIY review of controlled trials of what a Arrowsmith claims to train in poor readers



is known to improve

Poor reading

Trained skill

is known to improve

Poor reading

Step 3a: Find out what a treatment claims to train



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Google
Australia

"Arrowsmith"

Weak
cognitive
capacities

Step 3b: Find out if that training improves poor reading



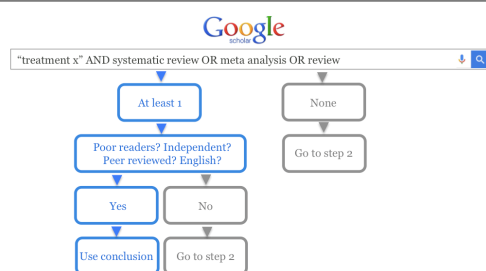
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Step 1: Find a systematic review

A review of controlled trials of a treatment in poor readers



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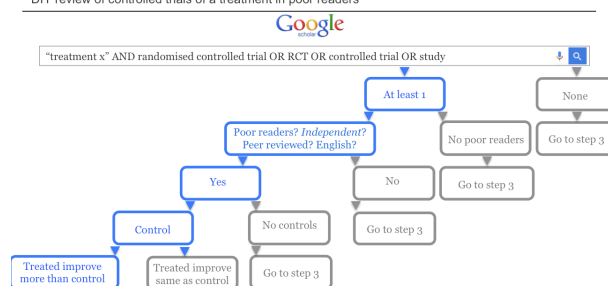


Step 2: DIY systematic review

DIY review of controlled trials of a treatment in poor readers



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Step 1: Find a systematic review



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A review of controlled trials of cognitive capacity in poor readers



Cognitive capacity AND systematic review OR meta analysis OR review



None

Go to step 2

47

Step 2: DIY systematic review



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DIY review of controlled trials of cognitive capacity in poor readers



Cognitive capacity AND randomised controlled trial OR RCT OR controlled trial OR study



None

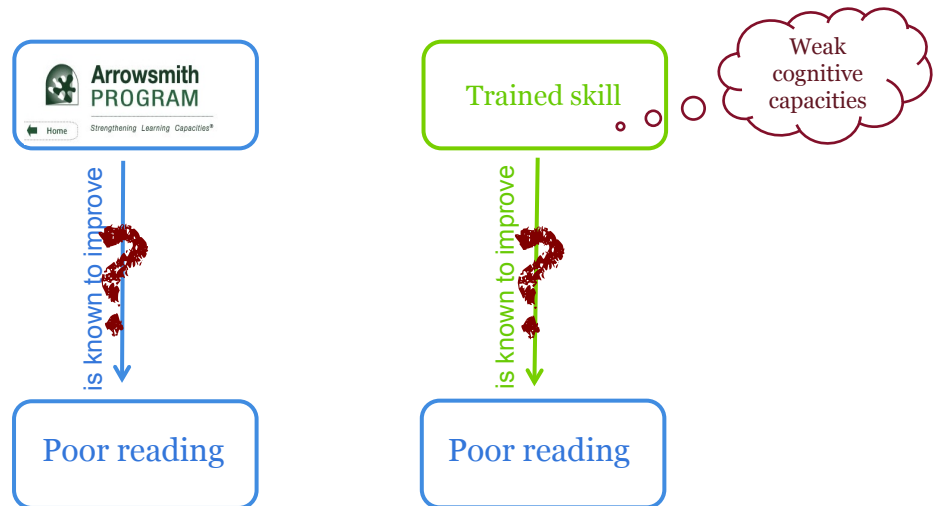
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Step 3: Use indirect evidence



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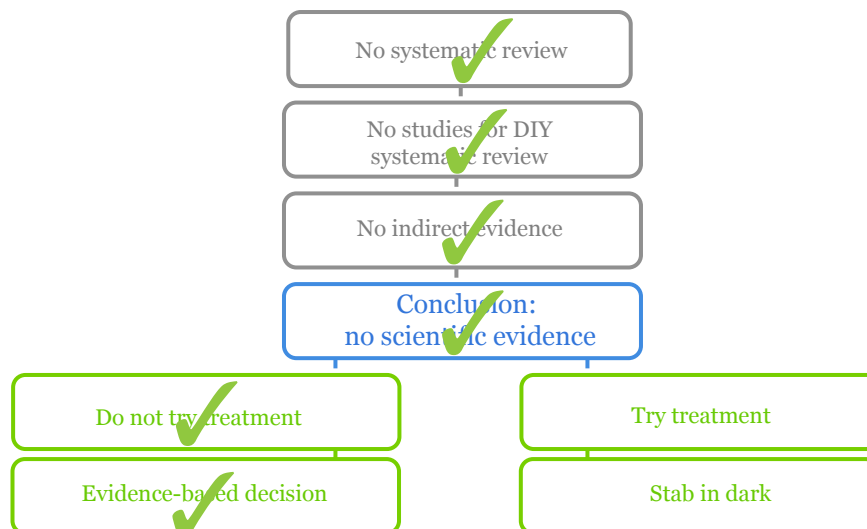
DIY review of controlled trials of what a Arrowsmith claims to train in poor readers



Step 4: Strike out



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Outline



Believe in the evidence and not anecdotes (ie how bad it can get)

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How to make evidence-based decisions about treatment for poor readers (ie a step-by-step guide)

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THANK YOU (FOR NOT BELIEVEING IN
INSTINCTIVE CORRECTNESS)