

ExWyZee Remedial Reading

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Induced Dyslexia

An excerpt from Part 5 of the ExWyZee monograph, [About Dyslexia].

[See Features 1 and 2 below.](#)

A TROUBLING QUESTION: TO WHAT EXTENT MIGHT DYSLEXIA BE INDUCED?

But first an analogy. Think of a hypothetical physical problem in your body (we'll call it the DYS Deficiency Syndrome) caused by inability of your gut to absorb

vitamin DYS . If your body was born unable to absorb vitamin DYS, then your DYS

Deficiency Syndrome is a no-fault illness. But if your gut is okay, and vitamin DYS

was routinely withheld from your school lunch tray, then we might consider DYS-DS to be an induced illness.

The question of induced dyslexia comes to mind through data in a study by the Shaywitz team, Bennett and Sally, reported in Biological Psychology, Bennet A. Shaywitz. Development of left occipitotemporal systems for skilled reading in children after a phonologically-based intervention.

A troubling scenario:

The Shaywitz team took reading-impaired students ages 6 to 9, made MRI brain scans of them, and found the scans to be typical dyslexic brain pictures of the sort

shown in the Sally Shaywitz book, Overcoming Dyslexia. Scans show inadequate

activation in dyslexics of certain left-brain regions involved in fluent reading.

Then

those students were treated to phonologically-based (think phonics)

concentrated

reading instruction.

After a year of that instruction, for an hour a day, five days a week, MRI pictures were again taken. Left-brain activity in the post-treatment scans was more like the typical pictures of the brains of not-impaired fluent readers. And reading ability of the 37 students in the Experimental Intervention group improved commensurately.

The same scanning and pre and post-testing was done with reading-impaired control groups (40 students) who received their schools' regular-classroom and regular-special-ed instruction. That group's left brain activity did not increase, and their average scores did not improve.

So what happened? Referring to those results as "brain repair" would not be appropriate, implying that brain damage caused the student's reading problems. But "brain revision" does seem fitting.

What's so troubling about it is the question of what the teachers in the study did to restructure the dyslexic brains. Did they invent some innovative cutting-edge methodology for teaching reading? Or did they simply do things that should have been done earlier and in a more focused instructional mode? As best I can tell from reading the research report, and reading what has been written by others about it, it appears that they used readily available teaching materials. (I have not been able to find out from the Shaywitz team what reading materials were used for the experimental group.)

But, since nothing in the report on the study suggests that the instructional materials were other than materials readily available in the education marketplace, the implication appears to be that at least part of the reading impairment in the students was due to insufficient prior reading instruction.

If it is not quite fair, nor technically accurate, to refer to that as induced dyslexia, it might not be too harsh to refer to it as negligently aggravated dyslexia. In what ways might those students' reading instruction have been insufficient? **Two ways come to mind. (This is my inference, not that of Shaywitz team.)**

Feature 1: A Wait To Fail policy, where, instead of routine and rigorous early screening, starting in grade-one, and providing intense instruction for at-risk children, a child might be eight or nine years old before the reading difficulty is seen as serious enough to merit referral for remedial help. By that age we've lost

prime time, when the brain is most receptive to learning skills for which it is not hard wired, skills like playing the violin, learning a foreign language, and reading.

(See Joseph Torgesen's article, Catch Them Before They Fall.)

Feature 2: Incidental Remedial Instruction, where skill deficits are treated only when incidents of those deficits occur during oral reading sessions – instead of providing Focused Remedial Exercises. By focused exercises I mean exercises and drills designed to concentrate a student's attention on specific phonics and sub-skill deficits, with that focused attention to go on for as long as the deficit is a

handicap to reading. For examples of focused drills, see the appendix in the monograph [\[About Dyslexia\]](#).