

FROM THE PRESIDENT

Welcome to the first issue of our new web-friendly format. This version of our newsletter contains complete articles, except for items we are unable to include for various reasons. We hope you like our new format. To send bouquets or brickbats, click [comments](#).

VOTING QUESTION

We want to know how accessible independent (private) schools are in your area. Please help us by participating in the poll [here](#).

After you have voted, you can give us more context by clicking on [comments](#).

HELPING YOUR STUDENT

Internet-Based Help for Teaching Students to Read

From now on, we will have a regular feature listing web-based resources to help with instruction in a particular subject. We have chosen to begin with reading, as it is the most important of all academic subjects. Students who struggle with reading are handicapped in almost every other subject, including math. A student's reading ability at the end of grade 1 is a powerful predictor of future academic success, salary, health, even length of life.

FOR PARENTS AND TUTORS

[ABeCeDarian](#)

This is an easy-to-use program for developing phonemic awareness, decoding, fluency and (to a lesser extent) vocabulary and comprehension from levels K-3. The lessons are clearly laid out in an easy-to-follow fashion. The program developer, Dr. Michael Bend, has drawn extensively from the best features of Lindamood-Bell, Phono-Graphix, Direct Instruction and recent research on fluency and accelerated learning to incorporate the critical components in an easy-to-use way. The materials are inexpensive, and the author answers questions and runs a Yahoo group to assist users of the program, whether they are parents, teachers or tutors.

[Funnix](#)

Funnix is a beginning reading program developed from the extremely effective Direct Instruction (DISTAR) reading programs which have been successful with tens of thousands of disadvantaged, learning disabled and special-needs children. DISTAR has also been used to accelerate the progress of young gifted students. Funnix is for parents or tutors and is a CD-based program. The adult controls the mouse, and proceeds to the next part of the lesson only when the student is successful. There is a workbook for Funnix 1 and a storybook for Funnix 2. Funnix 2 takes students to a late second grade reading level. Fluency work and writing skills are incorporated into each lesson. There is a placement test and parent instructions included with the CD, and the authors are responsive to questions through the web-site.

Headsprout

Headsprout Early Reading is aimed at children aged 4-7, but can also be used with older struggling readers who lack decoding skills. It teaches the essential skills for reading in an engaging way (the music and graphics are outstanding), and both school- and home-users are offered a money-back guarantee (some conditions apply). Children can do the online lessons independently, but need to be monitored by an adult to ensure they are following directions and reading out loud. The stories can be printed out and need to be read with a parent or other adult. The first half of Headsprout is appropriate for 4-5 year old children; the second half takes readers to a middle second-grade level. There is a great deal of information on the website, and the research base is extensive. An internet connection is required, as the instruction is individualized to each child and delivered "live." Customer support is outstanding.

Academic Success For All Learners

Dr. Alan Hofmeister at Utah State University took some of the federally-developed linguistic phonics materials from the 1970's and re-issued them with support materials for parents and teachers. These are very engaging little decodable books with plenty of practice built in as children learn to apply their phonics skills. Included are sound and word review pages and periodic benchmark tests. There are many free resource materials on the website, and Dr. Hofmeister or his staff will answer questions and are very helpful on the telephone. The quality of the books is very high: nicely-printed on sturdy, glare-free heavy paper, designed to withstand repeated use.

Reading Success *(for reading comprehension -- Grade 3 and up)*

Dr. Bob Dixon, author of several Direct Instruction programs, has turned his talent to producing some materials to teach reading comprehension strategies to middle grade students who have difficulty with summarizing, finding the main idea, inferring, and so forth. The materials have a lot of Canadian content. Direct instruction strategies are used. The teacher/parent needs to explicitly demonstrate the strategy, do it with the student, and then monitor as the student applies it independently. This product is for students who have at least Grade 4 level decoding skills.

REWARDS *(decoding skills for older kids, plus non-fiction reading strategies)*

This is an excellent program for helping middle and secondary students develop their skills in fluent decoding of long words - circumnavigation, heterogeneity, transcontinental, etc. - which make up such a large part of content-area reading. REWARDS Intermediate teaches the same word decoding strategies, but with vocabulary appropriate for students in grades 4-6. The later lessons in each level concentrate on building rate and fluency. These programs are designed for whole class usage (students can work in pairs), but can easily be used by tutors or parents.

Stairway to Reading

This is the Society's own reading program, for one-on-one use with students who have received some instruction but are struggling with reading. The program's logic is similar to that of Phono-Graphix, and includes a teacher's manual, student reading material, lessons, and supplementary activities. All components can be downloaded from the Internet free of charge.

[Teach Your Child to Read in 100 Easy Lessons](#)

Teach Your Child to Read in 100 Easy Lessons is an earlier adaptation of DISTAR reading for parents, and is very popular in the home-schooling community. On this site Dr. Phyllis Haddox, a co-author, offers other resources and some training materials to help parents using the book, which is aimed at very beginning readers (ages 4-6).

[Teach Your Children To Read Well](#)

Michael Maloney, of the Quinte Learning Centre in Belleville, Ontario, has developed this program (grade 1-8) for home-schoolers. It combines Direct Instruction and Precision Teaching techniques in a user-friendly way. There are many free resources available on the website as well, and the author is responsive to questions via e-mail or the 800 telephone number. A condensed version, Toolbox for Literacy, is aimed at tutors working with older students who need intensive reading assistance and rapid skill development.

SUGGESTED WEB-SITES FOR MORE INFORMATION

www.dyslexics.org.uk

Much information about effective instruction in reading and writing, maintained by a knowledgeable parent & tutor in the UK

www.fcrr.org (*Florida Center for Reading Research*)

Many interesting presentations on effective teaching (see under presentations by staff), as well as downloadable/printable resources for teaching phonemic awareness, phonics, vocabulary and more.

<http://readybygrade3.com>

Many reading-related links

<http://ldonline.org/indepth/reading>

Articles in depth and a useful forum on which parents and teachers can post questions and get answers from experts

<http://reading.uoregon.edu>

Excellent site, lots of info, aimed at educators but clearly presented. Focus is on beginning reading skills (K-3)

www.readingrockets.org

Excellent site, general audience, lots for parents and/or teachers

These articles by Dave Ziffer, a Chicago-area parent activist, are very worthwhile:

<http://projectpro.com/ICR/Phonics/Reading.htm>

How phonics helps your child to read

<http://projectpro.com/ICR/Phonics/CriticalThinking.htm>

How phonics teaches critical thinking

<http://projectpro.com/ICR/Research/Phonics/Summary.htm>

Summary of phonics research

LETTERS TO THE EDITOR

Improvement in Ontario Test Scores May Be Due to Easier Tests

The Ontario government is proclaiming that its students are doing better and better on the provincial tests of student achievement. For some reason, though, the government is failing to disclose that significant changes have been made to the testing, changes that are all in the direction of making the tests easier to pass.

This year, for the first time:

- Some elementary students could have the reading tests read to them.
- Time limits were eliminated for the grade 3 and grade 6 tests.
- The reading passages were significantly less difficult.
- The length of written responses was much abbreviated in the grade 3 and grade 6 tests.
- Grade 10 students could pass the literacy test even if they failed one of the two components (reading or writing).
- Calculators were allowed in every section of the math tests.

Even with all of this help, Ontario students scored only a couple of percentage points higher this year than last – still nowhere near the 75% of grade 6 students the government promised would pass the test by the year 2007. Clearly, stronger measures are going to have to be taken if the Ontario Liberals are to avoid breaking yet another election promise.

The Ontario government might like to consider allowing – indeed encouraging – the province’s teachers to use research-based, proven teaching methods and materials. Unlike the present strategy of making the tests easier, this approach would have the advantage of both raising test scores and actually improving student achievement.

Nancy Wagner,
Waterloo, Ontario

Problems With Special Education

A recent article in the *Ottawa Citizen* reported that the Ottawa Board of Education does not have a coherent, overall plan for special education. I would suspect that Ottawa is typical of the way most special education is managed in Ontario.

In fact, Ottawa may be one of the better school boards in this respect. For years, parents across Ontario have marveled at the Ottawa board’s ability to meet their kids’ special needs. Ottawa has a particularly good reputation with the parents of hearing-impaired kids, because the staff there were willing to enforce the use of hearing aids in the classroom, and because Individual Education Plans tended to be followed rather than ignored.

It’s hard not to have a plan for special education these days, since boards are required to send the minister a special education plan every year. It’s hard not to know how many kids are in the various special education categories, because that’s information that should be in the annual plan. If Ottawa does not have a plan for special education, it’s because the bureaucrats have chosen not to have one.

I think the article makes a mistake in assuming that trustees can intervene. The

only time trustees have power is when there is a power vacancy in a particular area.

The article is dead on in saying that parents ask for congregated classes because integration doesn't work for their special-needs kids.

Of course, there are few places for special-needs students, but many classroom teachers live in hope that the difficult children will be removed if someone can find enough things wrong with them. These teachers put pressure on parents to have their children tested again and again. In the meantime, educational assistants are often asked to take these kids into broom closets where, if they can't be taught, at least the regular teacher doesn't have to deal with them.

Kathryn Craig,

Waterloo, ON

Co-operative Learning Can Be Done Right

Of late, many teacher training programs across Canada seem to have abandoned the belief that competent instructors need a repertoire of teaching styles. Student teachers too often arrive in the classrooms of associate teachers prepared to engage students only in co-operative learning activities.

In Metro Toronto, the model for co-operative learning is still based on the "Together We Learn" document published by the seven legacy boards. This document clearly points out that co-operative learning is but one teaching strategy. Teachers should also use whole class and independent approaches where these are appropriate for effective student learning.

Effective teachers are committed to a multi-modality approach to teaching. Co-operative learning is one important component of that balanced program. Students need to discuss, effectively relate, share, debate, and clarify opinions.

At the same time, there are times in the school day when children should work in absolute quiet, because this instructional model reaches many learners more clearly and effectively for specific tasks. Individual research, thinking, writing, and reflection need to be undertaken privately. When this is the case, teachers plan for quiet activities or establish a "quiet" work area within the classroom.

It is important to note that a co-operative learning group is not a seating arrangement, nor is it an opportunity for pupils to "chat" while they complete a series of individual tasks that could just as easily be done alone. Effective co-operative learning groups are carefully structured to include a high level of positive interdependence, with members interacting to promote each others' success.

Parents need assurance that co-operative learning is not merely a loose arrangement of furniture. Organization should be purposeful and designed to help children interact in caring and supportive ways. Imaginative, challenging activities are the result of comprehensive planning on the part of the teacher. Without that planning, co-operative learning often becomes no more than a pooling of ignorance.

Teacher-directed lessons are not a lost art. Effective teachers move easily from dealing with students individually, to working with them in groups, and finally to teaching the class as a whole. In fact, successful models of co-operative learning al-

ways include teacher-led instruction because co-operative learning is meant to supplement the teaching program, not be the program.

If co-operative learning is to survive the faddism that so often accompanies instructional trends, two truths have to be acknowledged. First, parents and teachers have to be convinced that this kind of interactive learning is worthwhile. Secondly, educators need to demonstrate on a regular basis that co-operative learning is responsible, productive, and accountable.

In the real world, children need to know how to work independently, as well as in teams. If educators are going to help students to grow socially, emotionally, academically, and morally, then they must use an eclectic approach to teaching.

“The power of any given model of teaching is relative to any other model (and is affected by the style of the learner as well). Even when one model is clearly the most powerful with respect to the objective sought, one may not necessarily select that model at any given time because another model boosts other objectives deserving some priority or because a different model will reach the learner more clearly and effectively.” (Joyce and Weil, *Models of Teaching*)

David Pollard,
Toronto, ON

WEB-SITE OF THE MONTH

[Interviews with Reading Experts](#)

Each issue, we will draw your attention to a special web-site and tell a bit about it. This month, we highlight [Children of the Code](#), a web-site with a great deal of information about teaching reading, including interviews with over 100 leading neuroscientists, psychologists, reading researchers, educators, historians, and more. There is a fascinating interview with Dr. Todd Risley that includes a discussion of the .78 correlation of a child's IQ at the age of three with how much that child's parents had talked to him. [more](#)

FEATURE ARTICLES

[Faith in High Scores](#) by Malkin Dare

Once again, we used data from the annual EQAO provincial tests to rank the major Ontario English-speaking boards on the basis of the percentage of their students that met or exceeded the provincial standard (achieved level 3 or 4). The resulting table is below.

For the grade 3 and 6 tests, the score for each board was calculated exactly as it was last year, namely by averaging the average percentage of grade 3 students who met or exceeded the standard in reading, writing, and math with the average percentage of grade 6 students who did the same. The boards are listed in rank order. The second column shows the average percentage of successful students and the third column shows the difference between last year's average and this year's. As a whole, the grade 3 and grade 6 students improved by an average 2.16 percentage points.

To find out how many of the province's students are succeeding at grade 9 math, we multiplied the number of students in each group by the percentage of students who met or exceeded the provincial standard, added the two products together, and divided the sum by the total number of students. For example, here are the calculations for the province: $(50,687 \times .35 + 103,412 \times .71) \div 154,099 = 59.16\%$. The fourth column shows the percentage of successful students and the fifth column shows each board's rank compared to the other school boards. As a whole, the province's English-speaking grade 9 students gained 4.67 percentage points over last year.

There is, unfortunately, no way of knowing whether the rise in the results indicates a real improvement in student learning. The problem is that variations from year to year in the test itself, the test conditions, and the grading of the test can significantly influence test scores. Nancy Wagner's letter to the editor in this newsletter lists a few of the known changes to test conditions (all making it easier to pass). The available data do not allow us to know whether the slightly higher test scores are the result of real improvements in student learning or variations in the way the learning was measured.

While we should take the apparent improvement in test scores with a grain of salt, this is not the case when it comes to the results of the Catholic school boards. Catholic students are doing much, much better than public school students. In fact, all but three public boards got below-average results on the grades 3 and 6 tests.

What are the Catholic boards doing differently? Is someone looking into this amazing phenomenon? Should we be advising parents to convert to the Catholic faith and move to Stratford (Perth-Huron Catholic School Board)?

2005—2006 Grade 3, 6, and 9 EQAO Tests

		Grades 3 & 6		Grade 9	
	School Board	Passed	Change	Passed	Rank
1	Huron-Perth Catholic	75.50%	+1.33%	70.50%	4
2	York Region Catholic	75.33%	+4.16%	69.49%	6
3	Halton Catholic	72.67%	+2.67%	71.09%	1
4	York Region Public	71.50%	+1.83%	70.57%	3
5	Wellington Catholic	69.00%	+4.50%	68.60%	10
5	Niagara Catholic	69.00%	+3.67%	62.46%	26
7	Hamilton-Went Catholic	68.67%	+3.17%	60.78%	29
8	Kenora Catholic	68.33%	+9.33%	67.69%	11
9	Thunder Bay Catholic	68.00%	+6.00%	63.69%	22
10	Ottawa-Carleton Catholic	67.33%	+2.83%	61.70%	27
11	Waterloo Catholic	67.00%	+3.83%	65.99%	15
11	Renfrew Catholic	67.00%	+6.33%	66.46%	14
13	Durham Catholic	66.67%	+4.67%	49.87%	56
13	London Catholic	66.67%	+1.67%	69.13%	7

13	St. Clair Catholic	66.67%	+2.50%	54.15%	46
16	Brant/Hald/Nor Catholic	66.50%	+7.33%	63.94%	20
16	Peel Public	66.50%	+4.67%	59.29%	32
18	Windsor-Essex Catholic	66.17%	+2.17%	60.68%	30
19	Pet/Vic/Nor/Cla Catholic	66.00%	+6.83%	57.35%	40
20	Halton Public	65.17%	+0.67%	70.60%	2
21	Toronto Catholic	64.83%	+6.00%	55.70%	44
22	East/Ontario Catholic	64.67%	+6.17%	58.79%	34
	Province	63.33%	+2.16%	59.16%	
23	Bruce-Grey Catholic	62.83%	+2.50%	69.56%	5
24	Northwest Catholic	62.50%	+4.83%	NA	
25	Simcoe-Musk Catholic	62.33%	+2.66%	51.74%	52
26	Upper Grand Public	62.17%	+0.17%	63.32%	24
27	Durham Public	62.00%	+1.33%	58.02%	35
27	Toronto Public	62.00%	+1.50%	50.44%	53
29	Renfrew County Public	61.67%	+5.34%	64.84%	17
30	Kawartha/PineR Public	61.50%	+3.17%	57.61%	39
30	Keewatin/Pat Public	61.50%	+7.00%	54.05%	47
32	Dufferin-Peel Catholic	61.33%	-1.50%	62.96%	25
32	Niagara Public	61.33%	+0.83%	52.41%	50
34	Algonquin/Lake Catholic	61.17%	+3.84%	69.08%	8
35	Thames Valley Public	61.00%	+4.33%	64.51%	18
36	Huron-Superior Catholic	60.83%	+6.66%	55.35%	45
37	Ottawa-Carleton Public	60.67%	+1.00%	65.42%	16
37	Greater Essex Public	60.67%	+4.50%	63.66%	23
39	Waterloo Region Public	60.50%	+1.83%	60.39%	31
40	Bluewater Public	60.33%	+0.66%	64.32%	19
40	Nipissing/PS Catholic	60.33%	+11.50%	61.34%	28
40	Avon Maitland Public	60.33%	-1.17%	68.97%	9
43	Rainy River Public	60.17%	-2.66%	51.94%	51
43	Superior North Catholic	60.17%	+4.67%	NA	
45	Lamb/Kent Public	59.67%	+0.50%	57.90%	37
46	Upper Canada Public	59.33%	-1.17%	55.80%	43
47	Limestone Public	59.17%	+1.84%	56.65%	42
48	Lakehead Public	57.83%	+1.00%	53.53%	48
49	Superior/Green Public	57.67%	+4.50%	56.68%	41
50	Rainbow Public	57.50%	+5.33%	59.00%	33
51	Algoma Public	57.00%	-1.67%	57.73%	38

52	Trillium/Lake Public	56.83%	-1.50%	63.90%	21
53	Hamilton-Went Public	56.67%	+1.00%	52.89%	49
54	Sudbury Catholic	56.33%	-0.67%	66.83%	13
55	Simcoe County Public	56.17%	+1.34%	49.95%	55
56	Hastings-PrinceEd Public	54.67%	+1.34%	67.32%	12
56	Grand Erie Public	54.67%	+0.67%	57.92%	36
58	Northeastern Catholic	54.00%	-0.50%	35.91%	58
59	Ontario NE Public	52.00%	-1.17%	45.45%	57
60	Near North Public	49.17%	1.17%	50.33%	54

[Markets Versus Monopolies in Education: The Historical Evidence](#)

by Andrew Coulson (*“Education Policy Analysis Archives”, Vol. 4, No. 9, June 12, 1996*)

This is a very long article on the likely effect a free market would have on modern education. Historical evidence suggests that schools are more responsive to parents and get generally better results if they are exposed to competitive markets. [more](#)

[Phonics First – Or Bust](#) by Malkin Dare

I am a reading tutor who works with kids who are having trouble in school because of their poor reading. I succeed in teaching all my students to read, but not all of them learn as well as I would like. As a broad generalization, the younger kids are when I start teaching them phonics, the more fluent readers they become.

The youngest student I ever taught to read was my daughter, who was four at the time. She rapidly became a voracious reader. I have taught no kindergarten students and only one grade 1 student. That grade 1 student soon could read as easily as he could breathe. By way of contrast, none of my grade 4-and-up students has ever gone on to read for pleasure.

When it came to my grade 2 and 3 students, the ones who did best were the ones who had come to me with almost no reading ability. Although these kids had been exposed to reading instruction at school, very little had penetrated. As a result, I was able to more or less introduce these students to reading, starting at the very beginning, and usually they went on to become pretty good readers.

In other words, the more instruction my students had received at school, the worse their chances of becoming comfortable with print. I found this frustrating, and I wondered what was going on.

Then I came across the research of Yale’s Sally Shaywitz, MD. Dr. Shaywitz is a neuroscientist and one of the world’s leading experts on reading and dyslexia. In her book *Overcoming Dyslexia*, Dr. Shaywitz reports that her MRI studies show differing brain activation patterns in good and poor readers. Most of the brain activity in good readers is in the back of the brain, while the brains of poor readers light up predominantly in the front. It is the back of the brain that is best suited to the development of fast, automatic reading.

Instead of making good use of the systems at the backs of their brains, poor

readers turn to “alternate compensatory reading systems”. As a result, many do learn to read, but their reading remains “slow and draining”. Dr. Shaywitz has identified two distinct groups of poor readers. The first (and smaller) group may have a congenital glitch in brain processing, while the second group has intact brain wiring which has not been properly activated, possibly because of faulty reading instruction.

There are two basic approaches to teaching reading: whole-to-part methods, whereby the students are initially taught to look at words as a whole; and sound-based, whereby students are taught to process words from left to right on the basis of the sounds the letters represent.

I use a purely sound-based approach, but most public school teachers use an approach called “Balanced Literacy”, a whole-to-part method. Balanced Literacy, like most holistic methods, incorporates some elements of a sound-based approach (phonics and phonemic awareness), but never enough to qualify as a sound-based approach.

My hypothesis is that children who are introduced to reading via a whole-to-part method quickly develop maladaptive neural patterns that are very hard, if not impossible, to completely eradicate. I believe that most whole-to-part readers are forever destined to read some words as whole, and this creates a drag on their reading fluency. It’s like a computer with too many programs running simultaneously – the computer is seriously slowed down and may even freeze.

At this point, I must caution that my hypothesis does not appear to apply to about 25% - 40% of children – since some children manage to figure out the alphabetic principle more or less on their own. These children go on to become very good readers and are in a category of their own.

The evidence is overwhelming that early training really matters, since training of any kind produces real anatomical changes in the brain. Since this has been demonstrated with many different kinds of experiences, it is probably true of any training and we can be fairly confident that teaching children to read produces changes in their brains.

Training involves changes to the detailed structure of the pyramidal cells of the neo-cortex. These cells are large neurons that have a bush-like structure growing up out of them. The branches of the bush are called dendrites, and training elongates dendrites, produces more branches, and results in changes to their synaptic contacts with other cells. Changes like these tend to be permanent.

I believe that when children are introduced to reading via a method that looks at words as wholes, they are unlikely ever to become totally comfortable with print. Although it is possible to superimpose sound-processing (phonics) later on, few readers who were started with whole-to-part systems will ever lay down new neural patterns that will completely over-ride the old whole-word patterns.

It’s like a child who develops rickets as a toddler because he doesn’t get enough calcium. No matter how much calcium he absorbs later on, permanent damage has been done to his bones and he will never be able to run as fast as he should.

If you are responsible for introducing a young child to reading, please make

sure that the student is introduced to reading via a sound-based (systematic phonics) method. It is true that some children will do fine no matter how they are introduced to reading, but the odds are not in their favour.

(Malkin. Dare wrote this article with the help of Case Vanderwolf, Emeritus Professor of Neuroscience and Psychology at the University of Western Ontario.)

What Brain Research Can Tell Us about Reading Instruction

by Kerry Hempenstall (*"Learning Difficulties Australia Bulletin"*, 38(1), 15-16)

Brain-imaging techniques such as Magnetic Resonance Imaging (MRI) have been shedding light recently on how our brain adapts optimally to the tasks of reading and spelling.

When good readers confront text, they can be seen to rely heavily on separate areas in the left side of the brain. These areas are employed cooperatively to convert letters into sounds, fit the sounds together to make words, and to do so fluently. Flourishing students have learned the letters of the alphabet, the sounds that the letters represent, and how the sounds are blended to build words. In the brain images, the three areas light up quite clearly while such students are reading.

With this capacity, the left brain's parieto-temporal region becomes primed to decode (sound out) words, whether they be known or novel words. Progressively, as the readers see words in print, they start to build a neural model of that word. After they've correctly decoded a word a number of times, their neural model is an exact replica of the printed word. It specifies the way the word is pronounced, the way it's spelled, and what it means. In an accurate neural model, all these features are bonded together.

They clarify and store these new internal representations in the occipito-temporal region. When that word becomes represented in the occipito-temporal region, its recognition subsequently becomes automatic and instant - in about one sixth of a second. This is faster than one can predict the upcoming word. When this process occurs, students begin to display rapid, effortless word recognition rather than the slower sounding out strategy.

It's tempting of course to suggest that children not be taught to sound out because it isn't the way skilled readers are seen to respond to print. However, you can't access the occipito-temporal region without first building up the parieto-temporal region. On average, from 4-14 accurate sounding-outs will create the firm links necessary. For some children, it may take many times that number - not all children have strong phonological skills (a talent for discerning small units of sound). Either a genetic component or an instructional component may be involved in their lack of progress.

Those who struggle to read do not use the same brain regions for reading. Instead, they create an alternative neural pathway, reading mostly with regions on the right side of the brain - areas not well suited for reading. It is purely a compensatory strategy involving the visual centres of the right hemisphere - looking at words as if they were pictures. Little activity is observed in the phonological areas of the left

hemisphere where capable readers' activity is dominant. The brains of people who can't sound out words look different - there is less blood flow to the language centres of the brain.

If this sequential developmental process (from sounding out to whole word recognition) does not occur, then children will be forced to employ less rapid and accurate systems such as prediction from context, guessing from pictures, and guessing from the first letter. Up to 40% of children will discover the alphabetic principle for themselves quite readily - regardless of instruction. About 30% will get there, but slowly, and about 20-30% will not achieve it without intensive, appropriate direct teaching.

We now understand that the brain has the quality of plasticity. It responds to experiences that stimulate activity in particular areas of the brain, thereby facilitating the growth of neural connections in and between those active regions. That is why practice makes permanent. Practising productive reading strategies forms and strengthens task-optimal neural connections that enhance subsequent reading development. In the same way, routinely engaging in ineffective strategies similarly builds circuits in the brain not optimal to the task. These routines are not easy to break as students grow older, perhaps because between ages 5 to 10 there's a pruning process that erases the neural cells in the brain that remain under-utilised and unconnected. Forming neural links for language is relatively easy up to about age 6, and achievable though more effortful after that time.

The good news is that certain teaching strategies can alter this pattern of brain activation. A number of recent studies have indicated that about 60 hours of structured intensive daily phonics teaching alters the way the brain responds to print. Less right hemisphere involvement occurs, accompanied by more left hemisphere phonologically-based activity as reading improves. These new MRI images now correspond more closely to the pattern displayed by good readers. Importantly, in a study in 2004, the occipito-temporal region continued to develop 1 year after the intervention had ended. The outcomes included increased fluency, accuracy, and reading comprehension.

A recent MRI study of spelling produced similar outcomes. The brain activity of struggling spellers was discernibly different to that of competent spellers. However, when systematic spelling instruction was provided, spelling improved and the MRI profiles altered, becoming more like those of good spellers. Beginning with a need for phonological knowledge, the brain of the emergent speller (given adequate practice opportunities) establishes a new organizational pattern known as an autonomous orthographic lexicon. It enables automatic, rapid responses, without the phonological encoding previously necessary. However, English is a morphophonemic language, and expert spelling encompasses a further knowledge form. It involves an understanding of root words, affixes, and how they are assembled. This third interrelated level is morphological. Their intervention was based upon the Direct Instruction program, Spelling Through Morphographs.

These interventions require work and practice to achieve such positive outcomes, but many skills are hard won in our lives. Why should we expect these crucial abilities to arrive incidentally?

The brain imaging studies have also shown how difficult and exhausting is the task of reading for struggling students. These students have been shown to use up to five times as much energy as do fluent readers when reading. It is unsurprising then that they do not choose to read, and may become actively resistant to the task. Unfortunately, slow early progress predicts a decline in academic progress generally across their primary and, even more dramatically, in their secondary career, as they increasingly lose access to the curriculum.

The brain imaging research is fascinating, perhaps because it offers a glimpse of what appears to be happening when we teach effectively, and students learn something new. However, we don't actually need this information about which areas of the brain tend to be active when most people engage skillfully or otherwise in a task. We can always assess their competence directly using behavioural assessments, such as with reading tests. Observing changed brain function consequent upon effective instruction can be affirming to the teacher, but really, what did we think was happening during learning? Was it the kidneys we thought we were affecting?

Another interesting brain imaging issue relates to the oft heard comment "All children learn differently". It is difficult to argue with such an assertion, partly because it is difficult to operationalize it. However, it is usually presented as though it were self-evidently true, despite a lack of supporting evidence. In similar vein, there is a whole industry devoted to the need to attend to children's learning styles, again a notion lacking in empirical support. Within the broader context of whether humans' uniqueness or commonality truly defines them, it would appear that, at least for literacy skills, competence arises for each of us in much the same manner.

The National Enquiry into the Teaching of Literacy has directed our attention toward the findings of scientific research. These findings that can make a huge difference to the many students for whom the reading task is made unnecessarily difficult, whether the cause is due to brain anomalies (very few) or instructional inadequacy (the vast majority).

At such a time when real reform is possible, it is unfortunate that some politicians and teacher organizations decry both the need for change and the strong evidence upon which the recommendations are based. It is our children's future at stake. Time to move on this.

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[The Expert Mind](#)

by Philip E. Ross (“*Scientific American*”, August 2006)

This article draws on studies of the mental processes of chess grandmasters, to show how people become experts in other fields as well. It turns out that effortful study is the key to achieving success in chess, classical music, soccer, and many other fields. New research has indicated that motivation is a more important factor than innate ability. [more](#)

[The Agony of American Education](#)

By Lisa Snell (*reasononline*, April 2006)

Many people are aware of the extensive school choice available in Edmonton, Alberta, but do not realize that San Francisco offers school choice that is in some ways even more extensive than Edmonton’s. This article describes the San Francisco experiment, along with additional information about school choice in general. [more](#)

[Choosing School Choice](#) by Malkin Dare

For the most part, Canadians are blessed with a wide range of consumer choice. They can choose their vehicle from dozens of makes and models – sedans, convertibles, SUV’s, sports cars, mini-vans, and dozens of manufacturers – GM, Mazda, Kia, Saab, VW, BMW, Fiat, Volvo, Ford, Toyota, and literally hundreds of colours and options. This same level of choice is taken for granted by Canadians, and is available

in most other areas of their lives – food, housing, clothing, entertainment, day-care, travel, and so on.

However, when it comes to their children's education, most Canadians have little or no choice. The costs associated with private schools and home-schooling put these options out of the reach of most Canadians, leaving only publicly funded schools as the practical outcome. Unfortunately, most publicly-funded schools do not differ greatly from each other. Moreover, it is common for school boards to assign students to specific schools, giving parents no choice whatsoever.

The absence of school choice is primarily justified by people's desire for one strong public school system where all children attend a common-denominator neighbourhood school. Unfortunately, the more children attend neighbourhood schools, the less satisfied parents tend to be with those schools. Monopolistic schooling has inherent defects, including the dominance of special-interest groups like teachers' unions; excessively-uniform school policies; weak and inappropriate incentive structures; and inefficient, unresponsive bureaucracies. Even with the best of intentions and highly-qualified teachers, monopolistic school systems invariably disappoint.

Arguments against School Choice

The opponents of school choice argue that offering parents their choice of schools would lead to all kinds of undesirable effects – such as a two-tiered education system; a mass exodus from publicly-funded schools; social and religious fragmentation; the emergence of fanatical and/or fraudulent schools; and inefficiencies resulting from duplication of administrative costs. None of these arguments holds up to an empirical assessment of education practices in jurisdictions with more school choice. For a discussion of these and other school choice myths, visit

www.societyforqualityeducation.org/school_choice/1180.pdf.

Arguments in Favour of School Choice

The first argument in favour of school choice is based on parents' greater familiarity with their children's educational needs and the fundamental stake they have in their children's welfare. Since parents are much more likely to know what is best for their child than school board officials, parents are in a better position to oversee their children's schooling. Furthermore, parents are more likely to take ownership of their children's education if they have played a part in choosing it. The research clearly demonstrates that the more parents are involved in their children's education, the better students perform.

The second argument in favour of school choice involves fairness. As things stand, well-educated, affluent parents either work the system to get good service for their children or have the opportunity to enroll their children in private schools. For example, many well-known politicians (while professing strong support for public education) send their own children to private schools. Parents without the know-how and/or resources of more affluent families are forced to settle for whatever school comes their way. Expanded school choice offers less affluent parents improved access

to better education options, and as a result the overall level of student achievement and parental satisfaction rises.

The final argument in favour of school choice is an economic one. For at least 20 years, most provincial governments have been working hard to improve their public schools. Unfortunately, there has been no corresponding increase in either academic achievement or parental satisfaction. This performance failure is precisely what economic theory would predict: monopolistic school systems cannot directly produce good schooling. A shift to school choice would transform and energize schools by moving power from governments, bureaucracies, and special-interest groups to school-based educators and parents.

The Proof is in the Pudding

The best way to test these competing theories is to look at the provinces with the most school choice – Alberta, BC, and Quebec. These three provinces repeatedly do better than the other seven provinces on tests of student achievement. Alberta, the province with the most school choice, has the highest student achievement. The Atlantic provinces, which offer the least amount of choice, consistently record the poorest results on tests of student achievement.

When it comes to the problems that opponents of school choice predict, there is no evidence that any complications have actually materialized in Alberta, BC, or Quebec. For example, in those provinces there is actually a smaller achievement gap between high- and low-income students than in the other provinces. There has been no mass exodus from publicly-funded schools. There is no evidence of greater social and/or religious fragmentation. No fanatical and/or fraudulent schools have emerged.

School Choice Should be Auto-Matic

Canada has had government-run education for 150 years. To assess the implications of this monopolistic approach, it is instructive to compare the automobile industries in East and West Germany between the years 1945 and 1989. Both countries started off at essentially the same economic level in the aftermath of World War II.

Forty-four years after the War, East Germans were lucky to own a Trabant, a car so dirty and dangerous it has achieved cult status since disappearing from East German roads more than 10 years ago. It was powered by an anemic and smoky two-stroke engine, and its body was made out of pressed cardboard. A 1989 BMW, on the other hand, was one of the most advanced and well-made cars in the world. Even the lowliest car made in West Germany – for example, an Opel or a German Ford – had excellent comfort, performance, and reliability.

What was the defining difference between the car industries of the two Germanys? One operated under practical monopoly protection of the East German state, while the other innovated performance and customer satisfaction based on competitive pressures in the West German marketplace.

Accordingly, in the Canada of 2006, we really have very little hope and imagination for how satisfying a BMW education could be. Only wide-open school choice will reveal how good schools can become.

WHAT'S NEW?

[Provinces Should Fund Childcare Only For At-Risk Children](#)

- A C.D.Howe Institute paper entitled "[Let's Walk before We Run: Cautionary Advice on Childcare](#)" comes to the conclusion that Ottawa and the provinces should fund quality childcare programs only for at-risk children, as opposed to universal childcare. The researchers' review of the research found that children from low-income or single-parent families tend to benefit from subsidized childcare, but that the net benefits for children from stable, middle-class homes are doubtful. [more](#)

[An End to the Math Wars?](#)

- The influential US National Council of Teachers of Mathematics, which in 1989 launched the math wars by promoting fuzzy math, has unilaterally surrendered, and is now recommending an emphasis on basic arithmetic skills. [more](#)

[The Story of the \\$2 Million Comma](#)

- A punctuation blunder – a superfluous comma – may force Rogers Communications. to pay an extra \$2.13 million. CRTC regulators have ruled that a second comma in a crucial contract means that either party could cancel the contract with one year's notice, even during the first term. The sentence reads: "This agreement shall be effective from the date it is made and shall continue in force for a period of five (5) years from the date it is made, and thereafter for successive five (5) years terms, unless and until terminated by one year prior notice in writing by either party." [more](#) (*subscription necessary*)

[Teacher Certification Makes No Difference](#)

- "What Does Certification Tell Us about Teachers' Effectiveness: Evidence from New York City" is the title of a Harvard University study that matched some 10,000 teachers with six years of test results. The researchers found that there was little or no relationship between the certification pathways – traditionally-certified, alternatively-certified, members of the Teach for America program, or uncertified – that NYC teachers took to their classrooms. [more](#)

[Mandatory School Attendance for 17- and 18-Year-Olds in Ontario](#)

- "[Response to Bill 52: Implications for Home Educated Students](#)" is the title of Deani Van Pelt's presentation to the Standing Committee on the Legislative Committee of Ontario. Professor Van Pelt points out that the proposal to withhold drivers' licences from 17- and 18-year-olds who are not in school expands "the educational mandate of the Ministry of Education beyond the traditional school-aged child and beyond the traditional classroom, that is, beyond the traditional mandate of the secondary school." [more](#)

[Another Way to Cheat on Testing](#)

- "[Testing, Crime and Punishment](#)" is the title of a 2003 University of Florida study that examined out-of-school suspension rates for low- and high-performing students in 504 Florida schools. Economist David Figlio found that students who traditionally scored low on state tests faced longer suspensions during test time than the rest of the school year, while high-performing students had shorter punishments at test time. The change appeared only in grades 4, 5, 8, and 10, the very grade levels with tests that counted in terms of state rankings. [more](#)

[Both English and French Governments Going Back to Basics](#)

- Making education a national priority, both England and France are seeking a return to more traditional methods of teaching and discipline. In England, the move comes after disappointing test results after nine years of effort. In France, the reforms respond to declining standards and literacy, as well as widespread violence in schools. [more](#) and [more](#)

SQE ACTIVITIES

Demonstration Reading Project

- The Society's demonstration remedial reading project is entering its third year. The program is at a public school in the Rexdale area of Toronto, and more volunteers are always welcome. To learn more, contact [Doretta Wilson](#), 416-231-7247.

Why Canadian Education Isn't Improving

- Malkin Dare is the co-author of a new Fraser Institute paper entitled "[Why Canadian Education Isn't Improving](#)". The paper explains that monopolistic school systems cannot produce good schooling because of built-in defects that prevent them from achieving excellence. [more](#)

Saving For Post-Secondary Education

- We have linked with [KidsFutures](#)TM, a Canadian-owned and -operated company with an innovative rewards program that helps families save for their children's future college or university education costs. Members earn cash rewards for shopping with over 100 well-known product, service, and retail partner companies and brands. They can also apply for a no-fee CitiTM KidsFutures MasterCard and earn up to 2% of their purchases in rewards. The benefit to SQE is that KidsFutures will promote our logo and link to us on their web-site. The benefit to SQE supporters who use our special referral code (QUALITYED10) is a start-up bonus of \$10 in rewards. [more](#)

BOOK REVIEWS

Chalk, Challenge and Change: Stories from Ontario Women Teachers. \$28.

(Send cheque to Linda Rafuse, #9 – 5255 Lakeshore Road, Burlington, ON L7L 5X6)

This book sets out to capture the heritage and history of classrooms across the province from 1920 to 1979, as told by senior members of the Retired Women Teachers of Ontario. It does so, and more. The book shared with me the unique challenges faced by women teachers in the province, while depicting a strength of character that each had to possess to surpass those challenges and do the best job possible.

The stories told taught me how much the role of women in teaching has changed over the years. From the old-boy mentality of decision-making, to what now would amount to sexist treatment of women in the workplace. And still they carried on educating the province's youngsters.

The role of discipline and testing seems to have changed the most, given the experiences shared by the retired educators/historians. From a parent's perspective I wonder if there isn't a teacher today who wouldn't like to thump an unruly student in the head. We'd NEVER go there now, I'm sure.

Similarly, it seems that there was a huge focus on exams and regular testing that faded into oblivion. Perhaps there are lessons to be learned from Ontario's past regarding that issue?

Chalk, Challenge and Change displays a common thread of those issues in education that haven't changed in decades. Class size, lack of supplies, and salaries often still dominate the news from time to time.

My favourite entry is the following offered from the Hamilton Normal School Year Book 1925-26.

A School Idyll

by X

Ram it in, cram it in,
Children's heads are hollow,
Slam it in, jam it in,
There's still more to follow.
Hygiene and history,
Astronomic mystery,
Algebra, histology?
Latin, etymology,
Botany, geometry,
Greek and trigonometry.
Ram it in, cram it in,
Children's head are hollow.
Rap it in, tap it in,
What are teachers paid for?
Bang it in, slam it in,
What are children made for?

It adds a touch of whimsy to a compilation of stories and photos that make it easy for the reader to be transported to another time.

It's a time that I respect and in some cases wouldn't mind going back to when today's politics and bureaucracy of Ontario's education system become a bit much to take.

(Reviewed by Cathy Cove, former founder and director of ParentNetwork Ontario, past Ontario Parent Council member, and parent of two children in the public education system)

The Knowledge Deficit: Closing the Shocking Education Gap for American Children. E.D. Hirsch, Jr. Houghton Mifflin. 2006. 169 pages.

In his latest book, Dr. Hirsch once more tackles the disastrous effect of the current “content-neutral, skills-oriented concept of education” on students, especially disadvantaged students. He points out that not only is this discrimination unfair, but also that it has negative consequences in terms of social cohesion, democracy, and the health of the economy. As well, the academic gaps that open up contribute to teacher dissatisfaction and student boredom.

Excerpt from The Knowledge Deficit

“One quarter of all beginning teachers quit their jobs within four years. In urban settings, 50 percent of beginning teachers leave in five years or less. They leave mainly because of low job satisfaction and stressful work conditions, not because they can make better salaries elsewhere. Interestingly, one big cause of teacher dissatisfaction as well as student boredom seems to be the more chaotic character of the classroom at each successive grade level. American high school teachers are more dissatisfied with their jobs than elementary teachers, and fifth-grade teachers are more dissatisfied than first-grade teachers.

“One explanation for this gradual increase in teacher job dissatisfaction – the reason the teacher’s task becomes more difficult and unpleasant with each grade level – may be that as American students advance through the grades, their preparation levels become ever more diverse. This was a finding that Stevenson and Stigler emphasized in *The Learning Gap*, a superb comparative study of American and Asian schools. American teachers now take it as a matter of course that in the same classroom they must teach students who have gained and

who have not gained the most basic knowledge they need to understand what is to be taught. Here we are speaking not about differences of ability but about huge differences in relevant preparation.

“If the teacher directs the preponderance of instruction to students who haven’t gained the prerequisite knowledge, the repetition of that basic knowledge to students who already know it is extremely boring. But if the teacher directs the class to those students who have gained the prerequisites, then the lagging students will fall still further behind. For both groups, the classroom will be boring. Boredom creates discipline problems, which further contribute to teachers’ low job satisfaction. These are all effects that can be traced to the incoherence of the content that students experience under vague guidelines.

“Stevenson and Stigler found that teachers have much greater job satisfaction when they can depend on one another in a supportive chain over the grade levels. Then all the students in a class can be counted on to have a reasonable level of preparation for the new grade level. This makes for a much happier situation for both the student and the teacher. In short, the doctrine that teachers have been instructed to hold – that their almost complete control over what they will teach is a plus for them – turns out, in considering the larger picture of curricular incoherence, to be a major cause of their professional unhappiness. By the same token, curricular incoherence is also the major cause of the inherent unfairness of our schooling. The unproductive use of school time, the changing content, the repetition, and the fragmentation that result from lack of specificity are bad for all students but are most disadvantageous to the already disadvantaged.” (pp 117-119)

Myths and Misconceptions about Teaching: What Really Happens in the Classroom. Vicki E. Snider. Rowman & Littlefield Education. 2006. \$32 US. 214 pages.

The author identifies six myths that are blocking the development of validated teaching practices and programs. These myths affect all students, but especially hurt low-performing students – those with disabilities or risk factors. Dr. Snyder uses current research to illustrate the faulty premises that underlie the myths.

The Six Myths

- The myth of process emphasizes what occurs during instruction and de-emphasizes what happens as a result of instruction.
- The myth of fun and interesting ensures that the process is not only emphasized but is entertaining as well.
- The myth of eclectic instruction refers to the practice of drawing on a variety of teaching methods and materials.
- The myth of the good teacher assigns most of the variation in teaching quality to the personal characteristics of the teacher rather than to the quality of the teaching.
- The myth of learning style refers to the popular idea that teaching methods should be matched to students’ unique characteristics.
- The myth of disability refers to the low expectations that are conferred on students once they are believed to have a disability or risk factors such as low socioeconomic or minority status.

Excerpt from Myths and Misconceptions about Teaching

“Latham randomly selected 20 engineers, 20 physicians, 20 lawyers, and 20 educators and asked them to describe a problem that they commonly encountered in their work. Then

he asked them how they would go about solving the problem and what formed the basis for their solution. Engineers referred to laws, principles, and formulas related to physics. Physicians generally referred to their knowledge of physiology, anatomy, microbiology, and chemistry. Lawyers referred to constitutional law, statutes, precedent, and logic. Educators gave responses such as the following:

‘It seemed at the moment to be a good way to handle the situation.’

‘I’ve used it before, and it’s worked well.’

‘It was suggested to me by a [teacher/ supervisor/ professor/principal].’

‘That’s the way the teacher’s manual said to do it.’

‘I was taught to do it that way at the University.’

‘I don’t really know, I never thought much about it.’ (p.15)

“Imagine if doctors based their decisions on hunches and hearsay rather than on scientific evidence. After an emergency hospitalization for a pulmonary embolism, Diane Ravitch described what would have happened if her doctors had been education researchers instead of doctors. ‘Among the raucous crowd of education experts, there was no agreement, no common set of standards for diagnosing my problem. They could not agree on what was wrong with me, perhaps because they did not agree on standards for good health’. The education researchers could not reach a consensus on a cure, either.

‘Each had his own favorite cure, and each pulled out a tall stack of research studies to support his proposals. One group urged a regimen of bed rest, but another said I needed vigorous exercise. One prescribed a special diet, but another said I should eat whatever I wanted. One recommended Drug X, but another recommended Drug Not-X. Another said that it was up to me to decide how to cure myself, based on my own priorities about what was important to me.’

“Although medical science is imperfect, doctors base decisions on the best available treatments. Why shouldn’t school children have similar protections?

“Some people do not believe that the scientific model of research can work in the social sciences, but I disagree. I have heard educators argue that it’s easy to control variables in medical experiments. It seems to me, however, that there is every bit as much variability among doctors as teachers, and as much heterogeneity among patients as school children. Life-style choices affect the incidence of disease just as surely as demographic factors affect school achievement, but medical professionals don’t give up on patients who don’t take care of themselves.” (pp176-177)

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