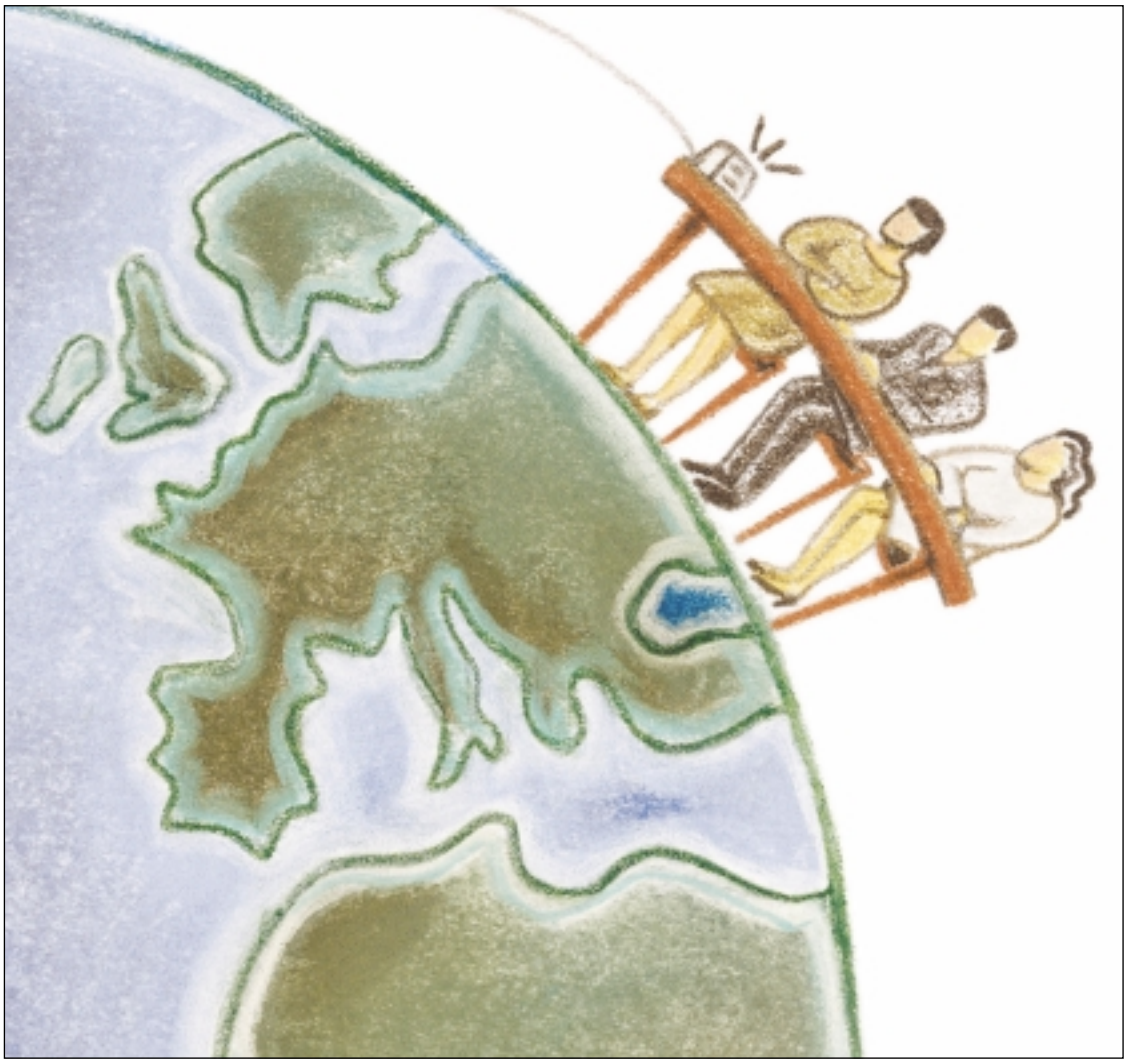
Leadership and the learning revolution

What's in it for me?



The following notes are offered as an introduction to the fields of accelerated learning and brain-compatible learning, and their application in business and government workplaces. The author is part of a global team working to combine the best learning methods in the world with the best information and communications technology – and to make the results readily available in workplaces, classrooms, and homes in India, China, Sweden, New Zealand, Australia, the United States, Canada, and elsewhere.

By Jim Muckle

What Does My Life Look Like?

Do you ever wake up in the morning and wonder how much of your brain is on cruise? Or maybe even on drift? And then you get to work, and there's some superstar whose brain is always in hyperdrive? You know the type – they seem to have more energy, they seem to remember things more easily, they seem to be better organized, they seem to get more done in less time, the boss asks for their opinion first … I used to hate them too. And while you might not want your whole life to look like that, every now and then you'd like to have just a little? After all, you both show up for work with your 100 billion brain cells. It's just that sometimes a bunch of yours seem to be along for the ride! **How often have you concluded it's just the luck of the draw?**

What Does the End of My Day Look Like?

Then there's going home at night. How often do you reach the end of your day feeling over-worked, over-stressed, and frustrated that tomorrow probably will not be that different? It's as if our cognitive capacity is a fixed resource; there are days when we'd like to buy a few more blocks and plug them in. We tend to look at our work volume problems by focusing on what shows up in our in-baskets, e-mail, and phone messages. Our personal capacity doesn't usually undergo the same critical examination. Faced with constant change, we strive for success in environments characterized by demanding objectives, right-sizing, budget-cutting, implementing efficiencies, working smarter, and other tactics enabling competitive advantage. Are you wondering, "How does this guy know so much about my office?" It could be that you're not alone.

What is Success in the Knowledge Economy?

There is widespread agreement that the key to success in the change-based Knowledge Economy is innovation. High tech companies are spending huge amounts of time, energy, and money luring scarce talent to join their teams; much is made of the "brain drain" to the south. Consultants and books abound on enhancing creativity and innovation.

What's it going to be like in the Digital Age?

Whatever our days look like, our success depends on how much of our capacity we can call upon when the need arises. We all have enormous capacity – much of it unused. Using that capacity often determines what our lives look like. The impact of using our brain and its potential for learning is no less than that. Using more of what we already have is free – we just need to learn how. **How would that change your life?**

Why Might I Want to Use More of My Capacity?

Our own questions probably cover a wide range. How can I get more done in less time? How can I be more creative? How can we reduce our stress, illness and absenteeism? How can we stay on the leading edge in our field? How can we best manage our new business relationships? Where do I focus first in building a learning organization? How can I boost our return on training investment dollars from a 10 per cent (or less) recall norm to 85-100 per cent? How can I keep up with my competitors if they have already done so? As a student, how can I get higher marks? As a parent, how can I help my children get more out of school?

What does my life look like?

How would that change your life?

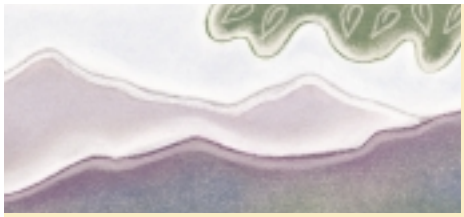
What questions are you asking about capacity and potential? Where is it costing you time, money, and competitive advantage by just thinking about it and not taking action?

Learning how to learn and learning how to think are the keys to unlocking more of our potential. Over 90 percent of all books on the brain have been written in the last five years. The Ontario government is following up on a landmark work, **The Early Years Study – Reversing the Real Brain Drain**[1]. The Report does an excellent job of linking what we now know about the brain and learning (from neuroscience and other disciplines) to early childhood development. We now know that about 50 per cent of our capacity to learn is available by age four, and a further 30 per cent is available by age eight. We also now know a great deal about how to use much more of that capacity, both in our early years and as lifelong learners. We are only in the early stages of sharing this invaluable knowledge with those around us.

We are even earlier in our application of this knowledge in workplaces, classrooms, and families. Are your children in schools that are focused on learning or focused on teaching? Is it possible that many of today's workplaces are not meeting our needs as individual and team learners? What would happen if your children had a better start in school? Can you picture your kids eagerly waiting for the school doors to open each morning? Would you like to visit a school where that's the case[2]? Can you picture being surrounded by people who look forward to going to work? Read on.

How Are We Learning About the Brain and Learning?

It is not so long ago that most brain research took place with brains that were no longer required by their original owners. Modern technology has made it possible to examine brains in the midst of a growing range of day-to-day activities. Most of our rapidly-evolving knowledge about the brain and learning comes from



What questions are you asking about capacity and potential?

Where is it costing you time, money and competitive advantage by just thinking about it?

What does this knowledge mean for me?

teaching hospitals and from research centres like the Salk Institute[3] in La Jolla, California. Technology is also speeding up the translation of that research into learning materials – books, video, and audio tapes, as well as workshop programs. As practitioners, developing our understanding and ability to apply these methods and tools in workplaces and classrooms, we're learning to move faster too.

More and more information about the brain and learning is showing up around us. The cover of the May 1, 2000 issue of *Maclean's*[4] had Canadian neuroscientist Steven Pinker sitting on top of a huge brain beside the caption "How We Think." The same issue included an article on the world's first mobile magnetic resonance imaging (MRI) system, now housed at Calgary's Foothills Hospital. In addition to its impact on neurosurgery, MRI technology is dramatically expanding our understanding of the brain and how we learn.

What Does Learning Look Like in My Brain?

The more we discover about the brain, the more we realize we don't know. Yet there is much that we do know. One of the things we know is that learning has a lot to do with developing new connections among brain cells (or neurons) and with strengthening existing connections. We say connections but our brain cells don't actually touch each other; they communicate with each other across tiny gaps called synapses. Our brain is designed to form and strengthen sets of these connections (or neural pathways) in response to external and internal stimuli. Using such modern technology as the MRI, we've learned a lot about how these pathways develop. We've also learned a lot about what kinds of activities encourage learning or the development of these neural pathways. We sometimes refer to those activities that are particularly effective in supporting the development of neural pathways as brain-compatible. We can identify those activities that are less effective as less brain-compatible. Some activities are even brain-antagonistic in that they get in the way of effective learning. As an example, one-way lectures or presentations may contain lots of information or be entertaining, but there's often little real learning going on – hence very low levels of recall and future application. On the other hand, activities that permit learners to relate content to their own needs and to generate their own meaning are much more effective in producing useful learning, including future recall and practical application.

What does this Knowledge Mean for Me?

We know that processing written text and the spoken word in the brain is highly correlated with short-term memory. And yet very few workplaces and schools use higher-capacity, longer-term memory tools such as mapping, music, aspects of our environment, location change, colour, body movement, easy-to-learn memory techniques, brain-compatible nutrition, and more. For example, we know a great deal about the brain's natural energy cycles, and yet we aren't using this knowledge to increase our productivity at work. How often have you been in a workshop and heard people joke about the challenge of being in the after-lunch slot – like it's something we can't do anything about? If you're the presenter or the learner, we now know you don't have to write this time off.

Many of us would be happy to be able to process and make sense of much larger amounts of information more quickly – even without learning to read faster. Would having much better recall help you become the one who the boss asks for an opinion? What would having much greater access to your innovative capacity do for you? Do you find creativity to be a black box filled with things that other people do? What if you had a set of thinking skills that allowed you to recognize that there are no new elements, only new combinations? What if you could do these things easily AND have more fun doing them? For most of us, our enormous capacity is readily available – we just haven't learned how to use it. **Learning to do things differently is the key to using much more of our capacity.**

Where Can I Find Out More About Doing Things Differently?

The amount of information available at our fingertips is staggering. Web searches (on "brain-based learning" or "brain-compatible learning") provide so much information, it's difficult to know where to begin[5]. National and international conferences[6] are bringing researchers, authors, leaders, managers, facilitators, and presenters together to share huge amounts of practical knowledge and experience with other interested participants.

The good news is that the delivery-to-end-user time is shortening with the same phenomenal speed that other things are happening around us. One of the best books on this subject and indeed the best selling book in the world in 1999 – over 9 million copies have been sold in China alone in the last year – is ***The Learning Revolution***[7]**.** The book can be examined on-line, and comes with a CD-ROM with several hundred PowerPoint slides and narration by the book's co-author, Gordon Dryden. The slides can be used for your own applications; and they can be easily amended or included with other material. And the 544-page book is designed to be skimmed in half an hour. There's something there for everyone: lots of practical examples of accelerated learning methods and tools producing remarkable, and yet someday normal, results. In addition to giving us the basics on the brain and learning, the book offers practical steps on learning faster and more effectively, tapping more of our creative capacity, teaching our children how to write much sooner by paying attention to their learning, taking advantage of huge growth opportunities for learning organizations in tomorrow's business world, and much more.

What About Leadership and Management?

Understandably, most initial applications of our evolving understanding of the brain and learning have been in education. Broader applications are emerging in business and government workplaces, specifically in the areas of leadership and management. We already know much about what resistance to change looks like in the brain, and therefore have a biologically based understanding of how to work with it. We know that when we lead and manage in command- and control-oriented ways that restrict choice, we shift the chemistry of the brain away from cognitive, analytical, and decision-making centres, the very centres we need people to use in order to make their most valuable contributions.

We also know that managing the emotional state of those we are leading, managing, meeting with, partnering with, doing business with, guiding in workshops, or teaching in classrooms is critical in enabling access to our thinking and learning potential. Without attention to this much underused aspect of who we are, learning is often a hit-and-miss proposition – so too with our leadership and management efforts, and with many of our relationships and activities.

Activities that permit learners to relate content to their own needs and to generate their own meaning are much more effective in producing useful learning, including future recall and practical application.

What's Happening at The Banff Centre?

As always, translating this knowledge into practical action is what counts. At The Banff Centre, for some time now, we've been applying many of these leading edge learning techniques in our very participative programs. The continuing success and appeal of the Leadership Challenge Program (pg.26) is a good example. Past graduates of the program will recall that they enjoyed: many opportunities to work in small groups to share their learning and to benefit from one another's considerable experience while exploring program content; choices among various learning project options, allowing participants to work on cases that were personally useful and interesting to them; a very practical, hands-on, team-based approach to collaborative decision-making that enabled participants to experience the benefits of working together and of tapping the contributions of everyone involved; and positive emotional experiences that ensured a deep-seated, personal understanding of important aspects of leadership practices and team-based communication.

We continue to develop this and other programs at The Banff Centre, designed to meet the evolving needs of our clients and to incorporate the best learning methods available.

I invite you and members of your team and organization to become our partners in **Leadership and Learning** at The Banff Centre. In response to growing interest in this emerging field, we are offering a new program by the same name, **Leadership and Learning**, created to transfer high performance learning knowledge and skills. It's a program that will help you access much more of your learning and innovative capacities, immediately becoming more effective in what you do. **What difference would such a program make for you, for your colleagues, or for your family members?**

You can find out more about this program – **Leadership and Learning** – on page 40 of this edition of ***Leadership Compass.*** Note that your registration in this program includes your own copy of ***The Learning Revolution***[7] and its accompanying CD-ROM. Although our first offering of this program will be January 28 – February 2, 2001, we invite you to register now as seating is limited. We'll send you your copy of ***The Leadership Revolution*** and CD-ROM as soon as we receive your registration. We've already had a great deal of interest, and we expect this leading edge program to fill up quickly.

How Can You Help Us Meet Your Requirements?

Join us in visiting those Web sites that interest you, and join me again in the next issue of ***Leadership Compass*** to look at some of the emerging global business opportunities in this exciting field. In closing, we ask you to take a moment to share your thoughts with us on how our learning-based programs and tapping much more of your individual and team capacity could best help you achieve your desired results (e-mail us at leadership@banffcentre.ab.ca or call us at 1.800.590.9799).

1 ***The Early Years Study – Reversing the Real Brain Drain.*** Completed in April 1999 by co-chairs: the Honourable Margaret Norrie McCain, the former Lieutenant-Governor of New Brunswick, and Dr. J. Fraser Mustard, founder and former dean of the McMaster Medical School in Hamilton. Visit www.childsec.gov.on.ca or call 1-800-668-9938 / (416) 326-5300 for a free copy.

2 Visit www.tahatai.school.nz where five-year-olds do computer animation, six-year-olds illustrate their own computer-set stories and add music from Vivaldi's Four Seasons, seven and eight-year-olds design a computerized rocket to do a 360-degree exploration of their principal's brain and produce a CD-ROM on their own school about the future based on brain-based learning, nine-year-olds use Hyperstudio stack-cards to animate their computerized depiction of a study of underwater sea life, and so on. All students exceed the national norms for reading, writing, math, and other subjects. Each student, at 12 or 13, leaves primary school with a multimedia portfolio showing full competence in Web design, Internet access and communication, and an extensive range of related design and production software and hardware. There is no truancy, no graffiti, and the school excels at art, drama, and sport.

3 Visit www.salk.edu. Click on ***Salk Research Related to Human Health; select Brain Research.***

4 At www.macleans.ca, select the May 1 issue, and click on ***full story*** after the first paragraph.

5 Excellent sites to visit include www.brainconnection.com and www.newhorizons.org.

6 This year's **Learning Brain EXPO 2000 – Brain-Mind Learning Conference** in San Diego, California in mid-January 2000 drew some 1,000 participants and presenters including about 20-25 Canadians. By the time you read this article, the speakers program for next year's Learning Brain EXPO 2001 will probably be available at www.brainexpo.com. If not, you can at least read about some of the January 2000 presenters. As an indication of the impact this activity is having on education, you might be interested in visiting www.thebrainstore.com to look at their mostly teaching-related materials.

7 Gordon Dryden and Dr. Jeannette Vos. ***The Learning Revolution.*** Torrence, CA, USA and Auckland, New Zealand: The Learning Web, 1999. ISBN 1-929284-00-4. Check it out at www.thelearningweb.net.