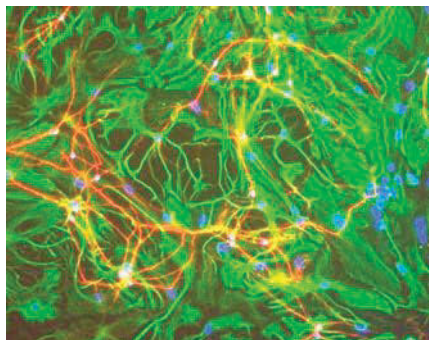


## Healthy glia, literate you!

Linda Gibson-Langford

Imagine the image below as a social network - well part of one.



Pablo Blinder  
American Friends of Tel Aviv University  
<http://bit.ly/s5P3VW>

See those red bits? They are neurons. But the green – the lovely bright radiant green - are our treasured glial cells. In fact, 90% of our brain is made up of glia (10% neurons and we are told we only use 10% of our brains...hmm). Glia are happiest massing in our hippocampus and also in our cortex, but can be found all over our brain, in league with those synaptic firing neurons.

In fact, the neurons are basically the brain bloggers; the synapses, the conduit by which the blog comments are sent; and the glia, our blog moderators, or according to recent research, our thought police.

A good moderator keeps the blogpost running efficiently, that is, the glial cells can speed up or slow down the transfer of information, and this bit of research makes me excited, astrocytes – the hippocampus/ cortex glia - could actually be the reason for our creativity and imagination (Koob 2009).

Ok, so we have a ‘social’ network running in our brains and if we have healthy and abundant glial cells, information transfer is efficient, memory is enriched and learning is accelerated.

That’s a good blog.

Let’s back up a bit. The glial cells are most abundant in our hippocampus and cortex – the parts of the brain that are essential for processing information, learning, and memorising. The glia then could be considered as the guardians of our information transfer system, our learning system and our memory system.

So what has this to do with literacy?

Lots.

We need to keep our glia happy. We need to understand the ways in which we can do this. As teachers/teacher

librarians, we merely need to enact a few rules, based on neurogenesis, to ensure we have prepared/ are continuing to prepare the ground for our students’ and our own lifelong development of literacy—an enriched environment, low caloric intake, meditation, exercise, and engagement in the act of learning – oh yes, and blueberries.

Literacy development depends on the ideals of healthy body-healthy mind-healthy environment.

We also need to understand the effects of not having a glia happy environment, and what happens when we squander what we have.

It is really gloomy.

Our glia wastes away and with it, effective information transfer, the ability to learn efficiently, and the erosion of memory. That’s it!

Continuous learning is synonymous with happy glia; happy glia are synonymous with acts of learning; acts of learning are synonymous with continuous development of literacy (no matter your definition of literacy).

And when your literacy development plateaus, so does your brain’s social network team! Read on...



*Linda Gibson-Langford is a teacher librarian at The King’s School, Parramatta. Having spent the greater majority of her teaching life in The Centre, she continues to be concerned about social justice issues, in particular, those surrounding literacy and indigenous children. The question she poses asks how as a nation we will address the social justice issue of functional literacy, if school libraries and qualified teacher librarians are sidelined?*

...to grow a nation economically capable and socially just is to ensure its population is literate...

### Happy schools, happy glia!

Apply this logic to the nation. When a nation's literacy development plateaus at or below functional literacy, the nation's brain slips into a zone that denies social justice and economic freedom; stultifies creativity and critical thinking; blunts enrichment.

Take school libraries. School libraries are synonymous with acts of literacy – promotion of reading, development of research skills, engagement in critical and creative thinking – augmenting and enhancing learning across the school community. However, if we continue the trend whereby teacher librarians are not leading in the richest learning environment in schools, the consequences could well be an even poorer report card for the nation.

The 2006 OECD Report, in summary, points to **1 in 5 Australians below the functional literacy level** (Level 3).

What's missing for 4 million Australians? Quite possibly, a national set of policies to ensure infrastructure is designed to create a nation of lifelong learners. Simply put, national literacy is both a policy and a management issue that is being badly handled, demoted to jargon, and convenient when political point scoring is needed. To grow a nation, both economically capable and socially just, is to ensure its population is literate, at or beyond:

*a level that as a nation is considered a suitable minimum for coping with the demands of everyday life and work in a complex, advanced society. It denotes roughly the skill level required for successful secondary school completion and college entry. Like higher levels, it requires the ability to integrate several sources of information and solve more complex problems (ACAL 2001, p.9)*

The foregoing is the descriptor for Level 3 Literacy as described by OECD.

Finland, leading the global literacy stakes, would not even dream of this as a minimum requisite. They have government policies that push high-order thinking skills. They are committed to the national project *Reading Finland*. They have bothered to, through the cooperative venture between School Library Association of Finland and the Finnish National Board of Education, publish *A good school library* (Frantsi, Kolu, & Salminen, 2006).

The lead author, by the way, is a Finnish school principal. It is a brilliant document – inspiring and powerful inasmuch as it cites a piece of legislation that empowers schools to maintain, as central and vital to their learning community, their school library, vis a vis:

#### Section 47

##### Supportive activities

Library, club and other activities closely relating to education may be arranged in conjunction with basic education.

#### Statement no. 6

##### In conjunction with the aforementioned legislation

Parliament stipulates that the Ministry of Education place emphasis on the development of school library and information services with sufficient breadth as part of the pedagogic development of teaching (2006 p.5).

Read statement 6, again! And focus on “emphasis on the development of school library and information services with sufficient breadth as part of the pedagogic development of teaching”. Could this be the reason for Finland's high level of literate citizens?

Our own literacy scoreboard is confronting; would it be more just if national policies were meaningful and infrastructure for such policies a priority (COAG Education Reform Report Nov 2011)?

### Happy school libraries, happy glia!

Returning to the beginning – keeping your glia happy includes acts of learning, and an enriched environment. The outcome of healthy happy glia certainly results in continuous literacy development. In schools, maintaining high levels of literacy means a good school library - an enriched environment, a learning commons, where acts of learning are palpable. It ensures young people are exposed to healthy environments where all young people can access the information they need to make the knowledge they need, supported by the teacher librarians they need to be successful, functioning citizens, that we, as a nation, need.

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