AGENDA

1. CALL TO ORDER

   The Chair will call the meeting to order and recognizes that tonight’s meeting is being held on the traditional territory of the Snuneymuxw people.

2. ADDITIONS TO THE AGENDA

3. DELETIONS TO THE AGENDA

4. CHANGE IN ORDER

5. APPROVAL OF THE AGENDA

6. APPROVAL OF THE MINUTES

   6.1 Minutes - May 12, 2010

   That the minutes of the May 12, 2010 Education Committee Meeting be approved.

7. PRESENTATIONS

8. EDUCATIONAL UPDATE

   8.1 School Start-Up

9. CORRESPONDENCE REFERRED FROM THE REGULAR BOARD MEETING

10. UNFINISHED BUSINESS

11. NEW BUSINESS
11.1 John Abbott - Philosophy of Education

12. QUESTION PERIOD

13. ADJOURNMENT
PRESENT:
Trustees - Voting
C. McNamee, Chair
J. Brennan
S. Welch

Trustees – Not Voting
D. Allen
R. Dale (Alternate)

Staff
M. Munro, Superintendent
C. Southwick, Acting Secretary-Treasurer
F. Frisson, Assistant Superintendent
G. Halfyard, District Principal
B. Esliger, District Principal
S. Bates, District Principal
D. Reimer, Director of Communications
C. Kelt, Executive Assistant

ABSENT:
D. Green, Secretary-Treasurer

In Attendance:
K. Proctor, NSAA Rep
H. Tarasewich, DPAC Rep
D. DeGear, NDTA Rep

CALL TO ORDER
Chair McNamee called the meeting to order at 6:00 pm.

ADDITIONS/DELETIONS TO THE AGENDA

APPROVAL OF AGENDA
Folio
E10/05/12-01

IT WAS MOVED BY Trustee Welch
That the Agenda be approved.
CARRIED UNANIMOUSLY

MINUTES
Folio
E10/05/12-02

IT WAS MOVED BY Trustee Brennan
That the Minutes of the Education Committee Meeting held April 14, 2010 be approved.
CARRIED UNANIMOUSLY
PRESENTATIONS

Ms. Shelley Serebrin
Nanaimo ACE

Ms. Shelley Serebrin, an SD68 teacher, made a presentation on behalf of the City of Nanaimo’s Advisory Committee on the Environment (ACE). The committee includes members from the community and advises city council on practices and policies regarding land use and development on the natural environment in the city.

She described the work of the committee that has an educational focus - addressing such issues as air quality and the impact of wood smoke; recognizing environmental initiatives in the community; support of the Environmental Mind Grind competition for schools and Bike to Work Week. She said the committee is also undertaking education and awareness of the city’s new pesticide bylaw.

EDUCATIONAL UPDATE

Math Implementation

Mr. Halfyard, District Principal of Learning and Instruction, gave an update to the Committee about the work that is currently underway in the district to prepare for changes in the secondary math curriculum next year.

The new curriculum will start with Grade 10 students this coming September. A number of meetings and workshops have already been held and are being planned to support secondary math teachers as they plan for the new curriculum.

CORRESPONDENCE REFERRED FROM THE REGULAR BOARD MEETING

There was no correspondence referred from the Regular Board Meeting.

UNFINISHED BUSINESS

There was no Unfinished Business on the Agenda this evening.
NEW BUSINESS

Aboriginal Education Enhancement Agreement

Ms. Stella Bates, District Principal of Aboriginal Education, reviewed the Aboriginal Enhancement Agreement with the Committee. She said that the report demonstrates how the district is doing in meeting the goals of the Aboriginal Enhancement Agreement with Aboriginal communities.

There are 2,062 Aboriginal students in the district – Inuit, Metis, status and non-status. Targeted Aboriginal funding from the provincial government supports school and district-based programs.

She said that while there have been overall improvements in Aboriginal student success in recent years, at both the provincial and district levels success rates have stayed the same in the past few years with about 45 percent of Aboriginal students successfully graduating from Grade 12 within six years of entering Grade 8.

Community Schools Report

The Education Committee discussed the Community School Report that was presented to the Board at its April 28th meeting.

The report, was completed by an outside consultant, Dr. Richard Zigler. Dr. Richard Zigler reported on the perceptions and opinions of stakeholders about community schools. He reviewed current community school practices in light of “best practices” and the role and function of community schools. He visited schools, met with focus groups and conducted surveys.

The district’s Community LINK Advisory Committee, which commissioned the review, has reviewed the recommendations and has laid out a plan to address the recommendations.

The first step for the Community LINK Advisory Committee will be to help develop a policy for community schools that will set the groundwork for addressing subsequent recommendations.
Minutes of the Education Committee Meeting held May 12, 2010

Agenda Item Number 6.1

IT WAS MOVED BY Trustee Brennan

That the Education Committee recommends to the Board of Education of School District 68 (Nanaimo-Ladysmith) that it endorse the draft Community Schools Report implementation plan; and that it be expanded to include consideration for neighborhoods of learning to be part of the plan; and that staff be requested to proceed with the work as outlined in the draft implementation plan.

CARRIED UNANIMOUSLY

BC Coalition for School Libraries - Funding

The report was referred to the Education Committee by the Board for further discussion. The Committee felt that it should give consideration to including library technology consideration in the referendum motion.

INFORMATION

There was no Information Items on the Agenda this evening.

QUESTION PERIOD

Shelley Serebin

Does this model of teaching math have research evidence that clearly demonstrates it is more effective in student learning?

Mr. Halfyard said that absolutely the research shows that the whole idea of conceptualized math is very different than procedural based math.

What efforts are being made to bring non-aboriginal students and teachers into greater understanding and valuing of aboriginal knowledge, skills and philosophy?

Ms. Bates described a project at a particular school that involved thinking skills - a multi-layered project - residential school experience and what it meant to aboriginal children.

ADJOURNMENT

IT WAS MOVED BY Trustee Brennan

That the meeting be adjourned.

CARRIED UNANIMOUSLY

The meeting adjourned at 8:12 pm.
Archive » An introductory explanation of the disconnect between the organisation of schools and what the neurobiological, cognitive and behavioural sciences are discovering about how humans learn

John Abbott 2010

My argument starts not with statistics about secondary schools, or even comments about various political initiatives, but rather with a kind of fable which needs careful thinking about.

Of all the animals in the woodland surely it is the deer that most excites human imagination? A peaceful herbivore, the deer’s survival over aeons of time has depended on its ability to sniff out danger, and then to run off to safety faster than any other creature. Over millions of years it has developed the sleekest and most powerful combination of bone structure, muscle and tendon so making it a veritable icon of animal fitness.

It takes all of two years for the young fawn to learn enough about the art of survival from its mother to move off to live on its own. Once responsible for itself the young deer has learnt not to panic when danger approaches, but to stand stock still so as to attract no attention; to sniff the air for the scent of danger; to hold a leg just off the ground to detect the slightest vibration of an approaching predator, and to flex its ears to pick up the faintest of sounds. All those skills have been perfected by its ancestors over vast periods of time and have become part of the instincts that create the character of a deer. A powerful set of survival skills it seems. But now no longer quite enough.

Setting out on its own as dusk creeps over the woodland the deer comes on a clearing of unnaturally level and hard ground. Suddenly, around a corner approaching at high speed, comes a noisy contrivance sporting two bright headlights. The young deer does everything that its instincts have taught it to do – in an instant it becomes immobile, sniffing the air furiously, sensing the vibrations and testing its muscles for action – but unsure of where to go. Mesmerised by the lights the young deer remains rooted to the spot a split second too long, and that young prince of animals, the ultimate descendant of an ages-old line of evolution, is killed instantly as it is hit head-on by a car. The car is probably a write-off, and the driver – if he is lucky enough to survive – curses the animal for its ‘lack of intelligence’ in not getting out of his way.

Like the deer, humans too are the result of an incredibly long saga of evolutionary adaptations that has taken us to the point where we have the intelligence and motor skills to build a car, send a man into outer space, and to carry out phenomenally complicated medical operations using the power of the new nanotechnologies. Because humans have evolved big brains, rather than a deer’s athletic anatomy, it takes our young far longer to grow up. Unlike the fawn, whose brain was nearly fully-formed at birth, human babies
are born with incredibly premature brains so that two thirds of brain growth happens after
birth, (an evolutionary compromise made necessary by the narrowness of the woman’s
birth canal resulting from our species learning to stand upright). Consequently most
human brain growth is shaped, not simply by instincts in the womb, but by the lessons we
draw from real-life experience. Here is the secret of our phenomenal brain: every baby is
born with a variety of inherited pre-dispositions that enable it to so internalise such real-
life experiences that it is able literally to grow its own brain, (in a way that the fawn does not)
and so reflect the increasing complexity of the environment in which it finds itself.
Thus humans have the capability to adapt, in very quick time, to almost any environment
— always providing they keep every one of their mental antennae alert to further
environmental change.

Within the past three hundred years (a mere split second on our evolutionary time-scale)
our ancestors have developed a range of technologies that have enabled our species to
spread out across the globe. There are now some twenty times as many of us as there
were when the first steam engine was invented in 1728; ten times as many of us as there
were in 1824 when the first railway engine enabled a man to go faster than on the back of
a horse, and two-and-a-half times as many as there were at the start of World War II less
than seventy years ago. This vastly inflated population (some would say a population
waiting for Mother Nature to carry out a savage cull) has only been made possible by
turning much of the world’s population into ‘specialists’, people who so concentrate on
the efficient production of the individual components of a machine or a process, that they
have little or no understanding of how any of this actually comes together.

Within the past two hundred years ever fewer young people now learn about growing up
through participating in what were until very recently family farms, businesses or
community projects for which they had to learn how every subpart contributed to the
usefulness of the final product. They had to know how things worked, for theirs was a
world in which connectivity was obvious — the strength of a chain was well understood to
be dependent on its weakest link, just as the speed of a convoy depended on the speed of
the slowest ship. Ours is a world of information saturation where the power of computers
doubles every eighteen months, and it is estimated that the world produces about five
exabytes of new information per year (an exabyte is a billion gigabytes). That’s about
37,000 times the amount of information held in the Library of Congress. This brings
enormous opportunities: ten years ago who would have thought of “googling” an old
friend and five years ago who would have known what a “wiki” was?

But it has also brought problems. In our search for greater material rewards, we seem to
have decided that there is no longer any reason for young people to learn, as did the
apprentices of old, by working alongside older people whose daily livelihood depended
on the entire team completing a product that was needed, and was saleable. Instead, and
especially in the past sixty years, we have decided that youngsters should spend even
longer studying in ever greater detail, and in theory rather than practice, a single aspect of
a sub-component, or a sub-discipline, as defined by somebody else. This, we are told,
will enable the wonderful productivity of the present technological world to thrive.
In exchange for what was once the satisfaction gained from a job well done, as shipyard workers cheered when the boat they had built together for two or three years finally slipped into the water, people are now paid good money for a job that may have little or no intrinsic satisfaction. All it gives them is a wad of twenty-pound notes to spend in their free time, but not the satisfaction of a job well done. Too many of us don’t even realise how vulnerable this makes us, because we have too readily exchanged wealth today for any sense of personal responsibility for the future. Education for many has come to mean doing what you are told and not asking awkward questions.

“Cultural speciation” – cultural change requiring people to modify their behaviours and attitudes – proceeds infinitely faster than does “biological speciation”, the development of biological adaptations to changed sets of circumstances. In other words, what we are now expecting from individuals in our so-called advanced culture has far outrun those adaptations inherited from the past which, when properly utilised, streamline the operation of the brain. While the human race is wonderfully empowered by its ancestors, it is certainly constrained as well. It seems that we are endlessly adaptable, but only up to a point. Being driven to live in ways which are utterly uncongenial to our inherited traits simply drives people mad.

In the past twenty or thirty years scientists have learnt much about the grain of the brain. We now know that, because of our initial physical vulnerability we learn a whole raft of skills in the first seven or eight years of our lives through closely imitating the actions of our parents and teachers. Young children’s learning is clone-like. It is entirely appropriate that a young fawn should grow up as a mirror of its parents. But for a human child to grow up merely as a clone at a time when the cultural and economic environment is changing so rapidly, would be nothing short of a disaster. In our time the next generation has to be equipped to go where no one has gone before.

To do this we must not forget the past, but at the same time we have to recognise that to twenty-first century man the past is only a partial clue to the future. The massive structural changes in the adolescent brain that scientists are now discovering through extensive functional MRI scans, apparently shake the internal mechanisms of a teenage brain to its roots. If this is true, and all the signs would suggest that it is, then these have to be essential evolutionary adaptations that ensure the survival of the human race by forcing teenagers to break away from their parents and teachers. “Get off my back”, adolescents down the ages have pleaded, “Leave me alone. Give me space”. Adolescence is about growing up and no longer thinking like a child. It’s about ceasing to be a clone. Sitting still (if only for part of the time!) may be an appropriate learning environment for the pre-pubescent child, but it is largely inappropriate for adolescents whose biological pre-dispositions urge them to find out things for themselves.

And here is the crux of the present advanced world’s dilemma. Little more than a hundred years ago American psychologists started to define this self-defining rebelliousness of adolescence as a disease, an aberration, something that had gone wrong, something that meant that teenagers were becoming a threat to themselves. Psychologists and educational bureaucrats alike concluded that something had to be done to prevent
teenagers from screwing up. Because that was how they saw it. Adolescence seemed suddenly to be a threat to the careful and comfortable world that teachers of the earlier years had created.

Educational administrators saw only one answer to the problem: put adolescents into school for longer and longer, and give them so much studying to do that they wouldn’t have the time or energy to question what an adult society was actually doing to them. And we’re still doing this today. So policy makers, with little background in the neurological processes, expected that, by about the age of twenty-two or twenty-three, the next generation of young people would have been ‘broken in’ to the currently-defined way of doing things. In this their thinking resembled that of horse breeders who, until very recently, thought it necessary to break in a young foal after it has run relatively wild for two years. Now horse breeders carefully study the temperament of every foal, and then define unique training programmes that build upon, and extend, what each can do naturally. Human adolescents crave and deserve no less. Deep down there stirs within them the urge to climb the mountains of the mind and see what possibilities lie before them; they are innately Big Picture thinkers, and frequently upset older generations by questioning the compromised lives so many of us lead. That is their nature. It is the apparently unreasonable dreams of adolescence that, years later, drive the progress of what we are proud to call our civilisation. It has always been so.

And yet, curiously, educators and politicians over decades have come to see schooling as a way of breaking children into what society defines as growing up, through becoming complacent pupils dependent on instruction. More recently society has so outlawed adolescence that most people simply accept the specialised roles that have been created for them, and have but a limited capability to look beyond their restricted world view to see the ecological, environmental and social crises that are hurtling towards them.

By misunderstanding teenagers’ instinctive need to do things for themselves, isn’t society in danger of creating a system of schooling that goes against the natural grain of the adolescent brain that formal education ends up trivialising the very young people it claims to be supporting? This is an unintended, but inevitable, consequence of an outdated design brief (from the shape of schools, the nature of the curriculum, the structure of assessment, and the way teachers teach). By failing to keep up with appropriate research in the biological and social sciences, current educational systems continue to treat adolescence as a problem rather than an opportunity bequeathed to them through the genetic transfer of important mental pre-dispositions to learn in particular ways. These pre-dispositions, once activated, transform the clone-like learning of the pre-pubescent child through adolescence into the self-directed learning of the mature adult.

By trying to subvert the natural processes of growing up in order to fit more comfortably into our present economic state, we have created whole generations of young people and adults who are now mesmerised by the bright lights of a way of living that is hurtling, out of control, towards us. Like the young deer, we too are transfixed by the lights which are about to destroy us. Far too many of today’s so-called ‘educated’ people know of no way to find a solution that has not already been prepared for them and described in a text...
book. It is because we have effectively told young people not to think for themselves, but to follow instructions.

In this was the birth of the modern secondary school – a kind of holding ground in which the problems of adolescence could be worked through so that eventually youngsters would be mature enough to deal with adult society. School was the exact opposite of apprenticeship. Schoolchildren were required to sit docilely in classrooms, listening to the received wisdom of the teacher and then reproduce that knowledge when tested. Independent and creative thinking was not encouraged for that threatened the teacher’s control of the rest of the class. Young apprentices, on the other hand, had to be so put through their paces that the older they became the less dependent they were on the craftsman, and the more confident they were in demonstrating their ability to solve problems. Every skill learnt, every experience internalised, increased the apprentice’s sense of autonomy. Recent research in cognitive science and neurobiology makes it obvious that apprenticeship was a culturally appropriate response to the neurological changes in the adolescent brain. Apprenticeship was a form of intellectual weaning whereby the more skilful and thoughtful the apprentice became, the less dependent he or she would be on the teacher. The German philosopher Nietzsche put it succinctly, “It is a poor teacher whose pupils remain dependent on him”.

If Western society is to survive (and it really is as serious as that), it is essential that all those involved with young people escape from that assumption made a hundred years ago by early psychologists, that adolescence is an aberration, something which is an inconvenience – an irrelevance which has to be got over. That is what this book is all about. While the human brain has evolved to enable each of us to function effectively in complex situations – we naturally think big, and act small – modern education has become side-tracked into creating specialists who are well-qualified in their own disciplines, but nothing like as good at seeing the wider impact of their action. Because formal schooling has done its best to neutralise the impact of adolescence, recent generations of young people have been deprived of the strength that comes from knowing that they are not frightened of taking difficult decisions, and if necessary picking up the pieces when things go wrong. We have effectively lost the plot: adolescence is an opportunity not a threat. Understand that, and it changes everything.

An education system that truly went with the natural way in which people learn – I call it “going with the grain of the brain” – would prepare children in their younger and prepubescent years for the self-defining struggle that is adolescence. A delightful story illustrates this well. A man, seeing a butterfly struggling on the sidewalk to break out of its now useless cocoon, bent down and with his pocket knife carefully cut away the cocoon and set the butterfly free. To the man’s dismay the butterfly flapped its wings weakly for a while, then collapsed and died. A biologist later told him that this was the worst thing he could have done for the butterfly needed the struggle to develop the muscles to fly. “By robbing the butterfly of the struggle, you inadvertently made him too weak to live”, the biologist explained.

John Abbott - Philosophy of Education
Every child needs the struggle of adolescence to sort themselves out and put away those childish behaviours which earlier had served them well. Sometimes alone, often with their peers and supported by the guidance of wise and caring adults, adolescents need a careful mixture of guidance and the space to work things out for themselves. Through the struggle of adolescence they develop the strength for adult life. To waste adolescence is to deny future generations the strength that is essential to deal with the ever-changing scenes of life.