

Education for Today

Not Just Another Brick In The Wall



Education for today.

3 PARTS

- What's the situation? Why we need to change.



- What solutions in pedagogy and curriculum work?



- Challenges for public education, educators and parents.

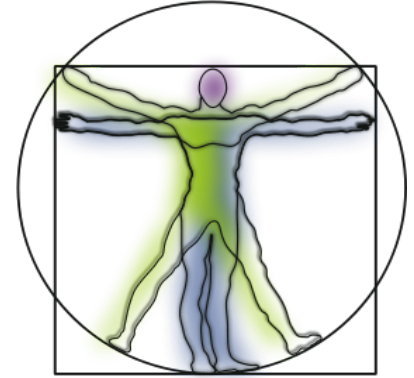


What's education for?

It should enable **personal** and **social** empowerment.



- Nurture **body**, **mind**, **spirit**
 - Psychomotor: manual or physical skills (skills)
 - Cognitive: mental skills (knowledge)
 - Affective: growth in feelings or emotional aptitudes (attitude or self)
- Each person is different.
- Everyone has multiple aptitudes and intelligences.
- Individual excellence combined with collaboration optimises yields.



Does it work? Sort of ... but it treats everyone the same and doesn't seem to give us basic skills we need.



- Students' potential is restricted rather than nurtured.
 - Children can not run around and explore.
 - Teenagers can not question traditions.
 - Young adults must choose a career before they've experienced life.

- Life skills not addressed

- food, health,
- money, politics,
- How the world works
- Collaboration – different and the same

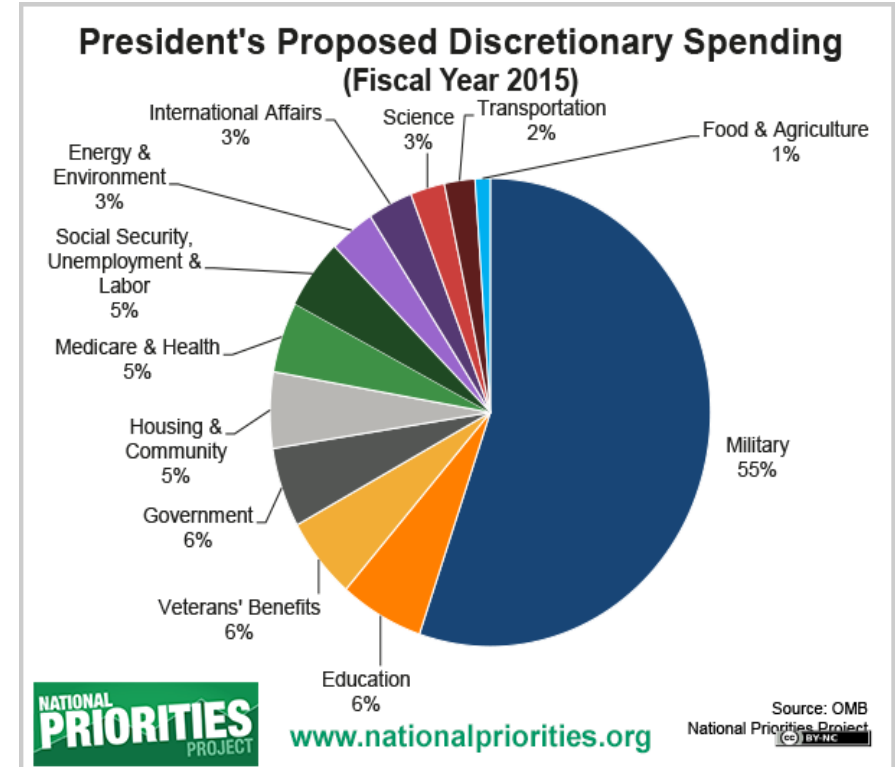


Why doesn't the system fulfil its potential?

Education is depreciated – we value guns before schools.



- Teaching and education are not valued enough by society (people).
- Schools may not innovate. The bureaucracy decides.
- Social stratification, division of labour and points/exams promote apathy and self-depreciation.
 - Ethics are neglected. Traditions may not be questioned.
 - Creativity is muted; no lateral thinking allowed.



And because we don't recognise its importance, it remains hidebound by tradition and unions.



- Public education emerged like a factory with the industrial revolution
 - Conformity, standardisation, mechanisation.
 - Processing batches of units (people)
- Focus on standard “product”, for army, factory, bureaucracy, church...
 - Aspiration replaced with rules.
 - Self-belief replaced with mantra.
 - Multiple talents replaced with single focus.
- Cogs in the feudal machine.



Consumers of education are looking for customised, relevant solutions.



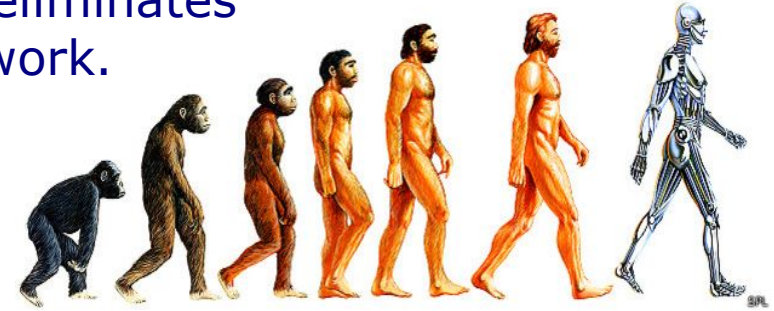
- There is an inherent public (state, NGO) demand for literacy and numeracy for all, at low cost.
- Industrial demand for creativity and initiative is not served by institutional policy favouring STEM without aesthetic aptitude.
- Parents and students are looking for personalised solutions
 - Active children need to run before sitting down.
 - Some children want to read and count early, others late.
 - Nobody wants to end up “stacking shelves” for life.
 - Interest in home schooling, unschooling; Steiner, Waldorf, nature based; Kahn Academy, Alison etc growing.



The world has changed and the education system must catch up.



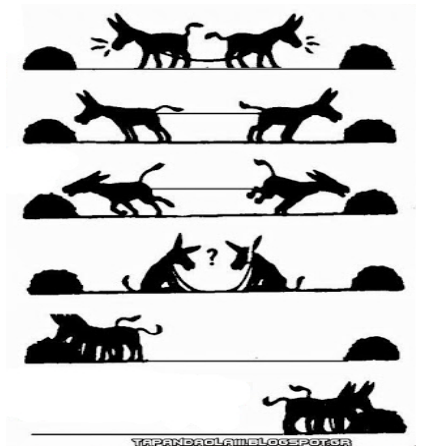
- As technology makes humans redundant and eliminates jobs, fewer people have the skills to live and work.
 - Illiteracy prevents participation in society.
 - Drop-outs drain society (social support, crime, etc)
- Toxic planet demands behaviour change.
 - We must think and choose our future or the system will implode.
 - Enlightened values nurtured by full spectrum education offers solutions.
- Resource constraints (less money for education, less time to change) demand low cost, high yield approach.



Civilisation's need for system enlightenment requires thinking, creative, social people.



- Thinking enables people to make choices – offering enfranchisement.
 - Following rules is not thinking.
 - Interdependent people make better choices than monolithic hierarchies.
- Solutions to problems demand creativity.
 - Following traditions is not creative.
 - Problems can not be solved with the same thinking used when they were created.
- Cooperation demands social skills.
 - Competitive priorities destroy resources. Non-winners are wasted e.g. underutilised female potential.
 - Virtual communities (text, social media) lack important aspects of enlightened behaviour (“I don't know”, “I'm wrong”, “Sorry”)



So, recognise the problems and solutions become common sense ...



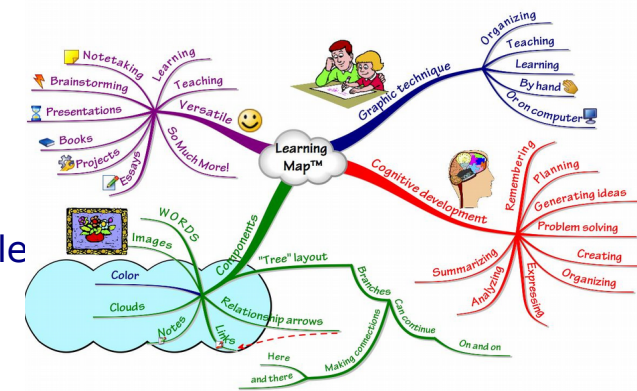
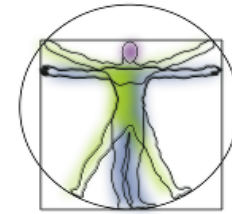
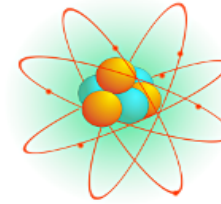
- We don't value education enough
- The system controls rather than liberates potential
- Its a one fits all approach
- It ignores life skills
- Thinking is penalised. Creativity is neglected. Collaboration is depreciated for the sake of winning.
- The demand for cost effective, bespoke solutions is evident from consumers.
- The disintegration of natural systems and human systems demands change.



Is it possible to adapt the system? YES!
And we know what to do.



- The laws of nature, of the universe, are better understood. (curriculum)
 - $E=mc^2$, scale of existence, atomic to universal science,...
 - All is one.
 - Monkey nature vs human potential.
- The technology of education is understood.(pedagogy)
 - The science of body, mind and emotion is better understood.
 - Psychology, neuroscience, physiology, ...
- IT enables low cost customised solutions.
 - Personal customisation of learning process and curriculum is possible
 - Autodidactic progress is possible (eg this media presentation).



Liberate education to realise people's potential.



- Adapt pedagogy to enable high educational yield and even self-learning.
 - Multiple intelligences – Aesthetic/creative, Ethical, Linguistic, Mathematical, Physical, Scientific, Social/political, Spiritual, Technological, ...
 - Learning styles - methodical study and fact retention, synthesis analysis, and elaborative processing, audio, visual, experiential, narrative, ...
 - Brain plasticity - variety of stimuli will have a higher impact.
 - Tools like TWIGing (Teaching With Immersive Gaming), Brain gym, Flow induction.
 - Age/ability appropriate curriculum.
- Culture is key



An inclusive culture nurtures self-belief, cooperation and ethics.



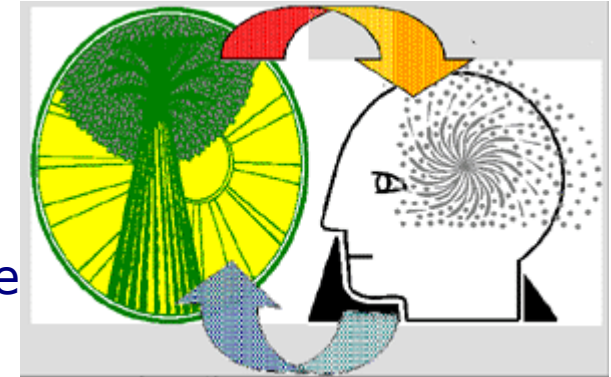
- Develop cognitive aptitude with academic process, but nurture behaviour (emotional aptitude) with pastoral culture.
- Open, but manners for morality (personal) and rules for ethics (system).
- Prevent exclusion and negative behaviour.
- Blame taken, never given. ("I'm wrong." "Sorry.")
- Evaluation by portfolio of work.
- No winners. Ranking OK. But no prizes for #1 - that is its own prize and a responsibility.



Engagement is the primary influence on learning, so prioritise experiential process.



- Humans construct knowledge individually, they do not “receive and store” it.
 - Passive communication, like lecture and textbook, has lower retention.
- Repetition reinforces particular pathways in the brain, but does not enhance thinking.
- Assimilation occurs as we copy what we experience.
- Accommodation occurs as we challenge the experience and environment around us.
- Learning is an interactive process. The culture in which learning occurs is part of the process.



Design education systems for ***flow***.

To be immersed in an activity with a feeling of energised focus, full involvement, and enjoyment.



- action and awareness are merged and cooperate
- distractions are excluded from consciousness
- self-consciousness disappears
- the sense of time becomes distorted
- the activity becomes an end in itself
- the chance of failure becomes an opportunity not a worry

High challenge

Anxiety

Flow

Low challenge

Apathy

Boredom

Low attitude and skill

High attitude and skill



Create environment to stimulate desire for learning and offer development challenges.



- A culture of engagement helps to promote flow.
- Clear goals every step of the way help focus learning.
- Immediate feedback to one's actions embeds learning.
- A balance between challenges and skills induces flow.
- Sensory environment, resources and role models nurture desire.
- Individual identifies challenge; "teacher" can help.



Home school is a convenient model (for the system), especially for pre-teen development.



- 2 hours a day to cover the same material.
- Student fully engaged – body, mind and emotion.
- Self-paced
- Virtual tools are low cost eg lectures on line, virtual labs, VOIP
- Exposed to real life activities so learning is meaningful.
- Supported by parents, mentors, etc
- Social engagement in community activities, eg sport, music, art, builds community conscience.



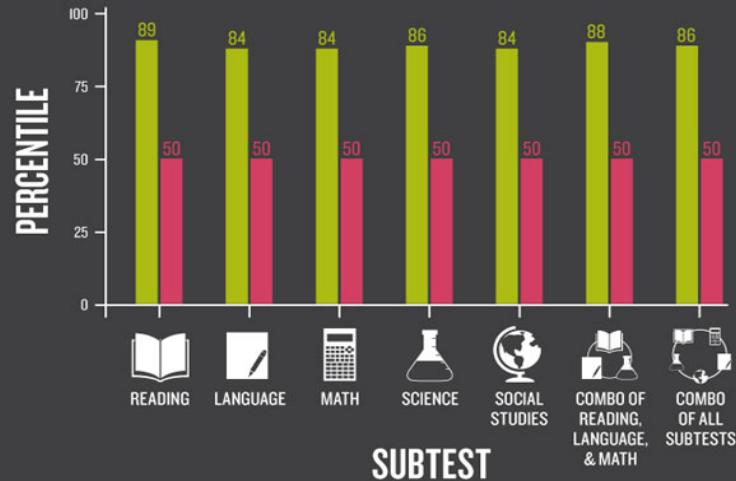
Homeschool works ...

NATIONAL AVERAGE PERCENTILE SCORES

When it comes to test-taking, homeschooled kids consistently out-perform public schools.

HOMESCHOOL

PUBLIC SCHOOL



BUT ARE HOMESCHOOLERS A LITTLE ODD? STUDIES SAY NO

In a study measuring communication, daily living skills, socialization, and maturity, homeschoolers outsourced public school kids on every level:



An education system that produces smart, mature students?
No wonder homeschool is expected to continue expanding.



So, pedagogy for enlightened civilisation should offer:
Personalised learning, in a community of practice.
Active. Self-paced. Supported. Peer learning.



- Active – learner engaged in the process.
- Proceed at own pace.
Master basics before moving on.
Choose pace and subjects within curriculum guide.
- Supported by coach, advisor, parent, technician, professional, mentor.
- Learn from one another.
The best way to learn is to teach.



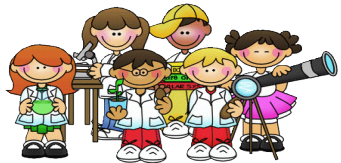
Redesign the curriculum with a natural foundation. Starts with the individual, then community and world view.



- Start with self (re Socrates and Pestalozzi), work out.
- Self-knowledge
 - Understand self: food, fitness, family, friends, home, brain/mind, imagination, visualisation, feelings (eg fear, delusion, dejection).
- Community/environment knowledge.
 - Work – capitalism, dealing with money; producing, creating
 - Play – relationships, games, art, hobbies, creativity
- Whole knowledge – understanding of natural law
 - The Big Picture world-view – habitat = environment, all is one.
 - Science to art, systems behaviour, metaphysical.

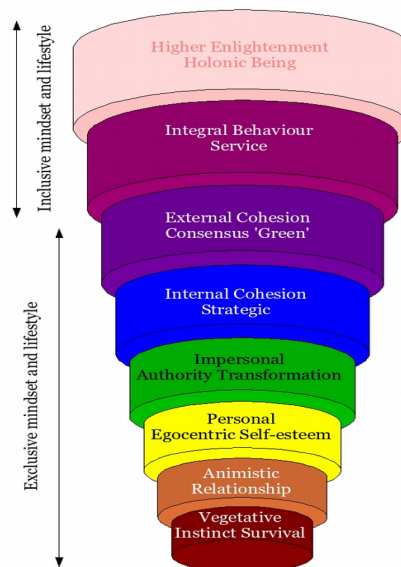


Curriculum is age appropriate reflecting physiology and culture.



Age		Stage	Focus	Curriculum	Pedagogy
0-6	Sensorimotor development	Mum	Ego/Interior	Love, joy	Love, forgiveness BUT boundaries
	Concrete operations (Real money)		<ul style="list-style-type: none"> Creation of intellectual capacity (talking to children) Cultivation of self-esteem Intellectual curiosity 		
2-9	Concrete operations-preoperational (Fake money)	Kindergarten	Ego Interior/Exterior Everyday concepts	Ethics Communicate, music, language, physical, dance, maths Speaking, listening, reading, writing, counting	Group, team, lead
7-14	Concrete operations – calculations and conclusions	Primary	Ego to Id Id	Sport, Ethics, Feelings Maths, language, coop, world, environment, IT, food,	Group, team, individual project, led
	Formal operations, abstract reasoning, “in the head” (Idea of money)		All Scientific concepts	Speaking, listening, reading, writing, counting	Portfolio, testing, group learning
12-19	Formal operations – concepts, relationships, abstractions, ideas	Secondary	Ego, Id, All	Sport, UN, Justice, Citizen, Art, Music Science, maths, language, build, design, construct, family	Group, team, facilitated. Portfolio, testing Experience
17-22		Tertiary	Id, All	Accounting, law, engineering, dance, farming	Qualification by exam. Experience

Emergent Values and Behaviours of Intelligent Life



Let children be children.




Age	Natural Development	Stage	Focus	Curriculum	Pedagogy
0-6	Sensorimotor development Concrete operations (Real money)	Mum	Ego/Interior <ul style="list-style-type: none">• Creation of intellectual capacity (talking to children)• Cultivation of self-esteem• Intellectual curiosity	Love, joy	Love, forgiveness BUT boundaries



Encourage youngsters to explore and socialise.



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A cartoon illustration of five diverse children of various ethnicities and ages, smiling and holding hands in a circle. The children are drawn in a simple, friendly style with large eyes and bright colors.

Give growing minds the tools to engage with the real, natural world.




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Challenge young adults with real world issues and tools.



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12-19	Formal operations – concepts, relationships, abstractions, ideas	Secondary	Ego, Id, All	Sport, UN, Justice, Citizen, Art, Music Science, maths, language, build, design, construct, family	Group, team, facilitated. Portfolio, testing Experience



Effective education demands a flexible, interdependent, experiential dynamic of lifelong learning and teaching.



- Education is about learning not teaching.
- Good teachers can be shared globally via IT
- Self-directed learning is catalysed with guidance, facilitation and encouragement.
- Learning by teaching is best. Teaching helps us learn.
- Everyone in the community – parents, peers, teachers, professionals – contributes to personal development.
 - coaching, mentoring, internships are important
- Fewer teachers supplemented with coaches and “masters/mistresses”. Everyone is a teacher ... and a student.



In summary the technology to enlighten pedagogy and curriculum is well founded.



- Pedagogy is culture
 - Inclusive
 - Active, fun
 - Engaging
 - Customised, self-paced
 - Shared, collaborate (not win at all costs)
- Curriculum for life
 - From you to them to the world
 - All is one
 - Science and art
 - Conserve not consume
 - Cycle of life

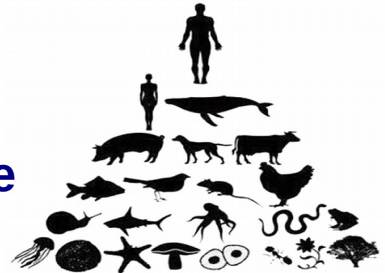
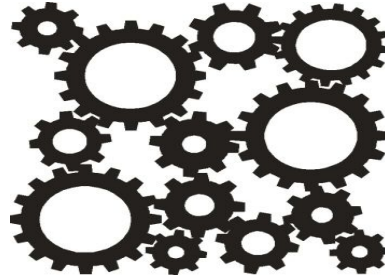


Governments and teachers can renovate education by taking a big picture perspective and responsibility for change.



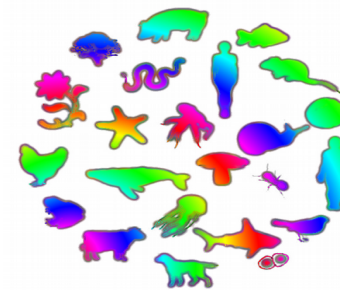
OLD

Centralised
Scheduled
Owned
Closed
Linear
Competition
Pyramids
Consume and waste
Human-centric
Monolithic
Human law



NEW

Distributed
Real-time
Shared
Open
Circular
Collaboration
Networks
Use and renew
Universal view
Modular
Natural law



To accelerate change, curriculum, tools, network and role models must be mobilised.



- Easy **access** to curriculum and materials enables parents and teachers to deliver full-spectrum nurturing.
- Easy **access** to tools of learning enables delivery of curriculum.
- Network of local **resources** (other students, parents, mentors, internship opps etc) encourages confidence in moving from factory model to nurturing model.
- Public **examples** of people choosing the new model and of its results will accelerate conversion.
- Certification system for abilities and aptitudes will emerge from employers and educators, though current standard tests will serve in the interim.



Parents, educators and governments can make the change happen now.



- Governments can look to **proven models**.
 - Finland, Steiner/Waldorf, Khan Academy, Sugata Mitra, Csikszentmihalyi, UWC, IB, et al
- Governments should **fund** adaptation of the system.
 - Prioritise over WMD, fossil fuel subsidies, etc
 - Encourage opening of system – pedagogy, curriculum, cost structure, certifications.
 - Pay and promote good teachers and remove bad ones, actively. (Students evaluate teachers!)
- Schools can invest in tools and create **diverse environments** for children
 - instruments, tools, art, sound, nature.
 - engage children in real life, safely.
- Educators adopt proven pedagogy, or step aside .
- Parents and schools can encourage a **culture** of engagement, creativity, fun...



So let's recap

In summary, it's time to enlighten education.



- Traditional education is past its prime
 - Standardised, inflexible, incomplete and costly.
 - Lack of understanding of consequences of individual choices is destroying our habitat.
 - Hindering the opportunity to embrace higher being.
- Pedagogy can be improved by nurturing an inclusive culture
 - Allow natural talents to flourish.
 - Engage learner in a collaborative process.
- Curriculum can be improved by focusing on natural, holonic technology.
 - Focus on practical technology
 - Take a universal perspective
 - Include ethics in every area.
- Everyone can choose to enlighten education.
 - IT has created opportunities and made change cost attractive.
 - Governments and teachers can lead the way by taking responsibility.



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