

Cleverlands

Spring Term 2018

Presentation (*condensed for printing* -
by Paula Lobo) & discussion notes

Clever
Lands



LUCY CREHAN

The secrets behind the success of the world's
most celebrated education systems

Finland



Humans are driven, arguably, by 'intrinsic motivation' (3.0).

The three elements that contribute to intrinsic motivation are:

- Mastery
- Relatedness
- Autonomy
- (Purpose)

Unintentionally, Finns have created a system that plays into the psychological prerequisites for intrinsically motivated teachers

- The role of education in the Finnish culture is huge; it was the foundation of Finland as a nation
- It is respected as a job that requires moral commitment and professional expertise
- Teachers are seen as bastions of Finnishness with a huge responsibility, and are held in high regard (**although the job is not highly paid or high status**)
- Teaching is a hugely popular profession
- Selection procedure for teachers is rigorous

Finland: mastery



- Teacher training involves a 5-year masters degree in education
- The course include research training, and all teachers produce a masters level thesis in an educational topic of their choice
- Teachers are taught the latest educational science based on up-to-date research on teaching practice
- The culture is that teachers need to read and discuss research with colleagues in order to be a good teacher
- **There is no evidence on whether the masters-level training makes a difference to student attainment**
- **No evidence that Finnish teachers have more 'relatedness' (positive relationships with others) than anyone else**
- However, there *are* 15 minute breaks between lessons to catch up in the staffroom over coffee
- Few positions of authority (usually only the principal), so most people are on an equal professional footing
- No performance-related pay that might put people in competition with each other
- Prevalence of small schools

Finland: autonomy & consistency



- There is significant freedom over how teachers do their jobs, **although there is still some bureaucracy**
- **Once qualified**, there is no observation or evaluation and no inspection; teachers are trusted and value their autonomy
- **Inspections used to exist – until the authorities judged that teachers were good enough to no longer be inspected**
- Surprisingly, there is a high level of consistency between lessons in different schools, in terms of delivery and structure, which is often traditional (Review-Lesson-Practice)
- Consistency is probably a result of high-quality and nationally-directed teacher training, and good quality textbooks

“You would not expect to see huge variation in the way doctors treat appendicitis across the country, or even the world, but that is not because doctors lack autonomy; it is because their practice is guided by research”

- The content of textbooks and suggested activities are based on research of what works best for helping children to learn
- It would be a waste of time to reinvent the wheel completely

Canada: introduction



“Canada is impressive and unique in that it gets relatively high PISA scores, while being a geographically dispersed and hugely divisive country, with a culture that is in many ways similar to the lower-scoring UK and the US.”

Each province and territory runs its own education, although each of the 10 provinces have a lot in common, including: a comprehensive education, similar textbooks, strong teacher unions, a common model for teacher training, and similar assessment approaches

Canada has... “balance...between the teaching of academic content and broader cognitive, social and moral skills...between having high expectations for all children but catering to individuals...[and] between holding schools accountable and providing them with advice and support to improve”.

- School resources and funding do not differ widely
- Early-years provision is of a high quality and children have opportunities to catch up on their reading in the first few years of primary school
- Learning Support Teachers are fully-qualified, certified teachers, often with additional qualifications in SEN
- Learning support rooms in secondary schools are manned by qualified, specialist teachers; students can ‘book in’ or pop by during free periods to get additional support
- **However, some of these well-meaning attempts to adapt the educational environment to certain students can lead to low expectations and, at worst, a lazy attitude to learning**
- **There is still a lot of support for catering to different ‘learning styles’ (Visual, Auditory, Kinaesthetic); there is almost no evidence that this works**

Canada: motivation & standards



- Impressive array of extracurricular activities, with support and encouragement for student-led activities; this 'gives students a stake in school' and provides opportunities for students to develop positive relationships with adults
- One study (Cornelius-White) concluded that teachers facilitate children's development when they demonstrate that they care for each student as a person
- Canadian schools are comprehensive but have different levels for different subjects, which students can **opt** into; a delay in pushing students into particular courses has been associated with higher student motivation
- Students can access vocational and academic courses at the same school
- Canada has an outcomes-based approach to assessment, which is criterion-referenced and grade-based, as opposed to a cohort-referenced assessment (comparing students against each other)
- The way that Canadian education is structured reflects certain views about intelligence, in particular that:
 - Intelligence is not fixed (unlike IQ) but develops in fits and starts
 - Talents and abilities develop at different rates
- More able students are put into higher ability groups, but not in a consistent way across all provinces, and ability grouping appears to have an unequal impact across different groups
- Using student 'levels' to project what students are capable of can put them at a disadvantage and lower expectations of them. They contribute to a 'fixed mindset' idea of what they are capable of, and alter teacher's expectations of their students
- School accountability in England often means 'culpability', which focuses effort on punishment rather than finding causes and solutions or offering support

Canada: accountability



- Canada generally places a greater emphasis in developing non-academic skills, which should not be sidelined in the quest for higher test scores. These skills include 'critical thinking' and 'problem solving'.
- Debates over 'discovery' or 'problem-based' learning as opposed to 'direct instruction' have been happening for centuries; Crehan argues that 'discovery' learning is often associated with a negative impact on results
- Problem-solving activities have their place (not least in avoiding a 'right answer' mindset, such as in China), but students should not learn the content in the first place through problems, as this limits their understanding of the basics.
- You cannot have advanced problem-solving and critical thinking without good subject knowledge, so the excessive use of any method that is not effective at getting students to understand academic content will reduce the range of topics about which they can think critically
- **Principals do not hold individual teachers to account for their class results – for example, the Grade 6 results are as much a responsibility of teachers in Grades 4 and 5 as they are for the teacher of Grade 6.**
- Results are used formatively, to help the staff as a whole reflect on school strengths and weaknesses
- Canada does not use inspectors but 'superintendents', who are responsible for a family of schools and monitor them
- Superintendents support schools (regularly and informally) by talking to principals, watching lessons and observing students, helping schools to learn from each other

Conclusion



- In order to make decisions about education systems, all we have to go on are correlations between particular policies and outcomes and case studies of systems that appear to be successful
- The five principles that form Crehan's synthesis of all she has learnt about effective education systems are 'underlying' approaches, only – they are applied in different ways in different countries, based on context and politics
- Her principles are not specific enough to be empirically tested, although here they are...

1: Get Children Ready for Formal Learning



- The most effective programmes seem to be the ones that build motivation and character *alongside* cognitive skills – so focus on ‘rich’ environments and playful learning rather than specific academic outcomes
- Preparing children for reading means building up vocabulary and knowledge across domains and familiarising children with letters of the alphabet through games and songs
- Children need two types of pre-mathematical skills: relational (e.g. classifying) and counting
- Children should spend time in getting used to being in a social environment, helping their self-regulation, planning skills and language development
- **Teach children routines that allow for smooth transitions between activities, such as handing books back or getting into groups**, saving time and preventing emotional disturbance later down the line
- Have 10-15 minute breaks between lessons to allow children to ‘let off steam’
- Make use of a multi-disciplinary team of professionals to discuss social and emotional problems that were interfering with school

2: Design Curricula Concepts for Mastery (and Context for Motivation)

- Have a defined sequence of knowledge and skills that children ought to be taught at each grade, to avoid boredom or alienation, and to ensure that children have access to key content at each stage. This sequence should be:
 - Minimal (fewer topics in greater depth)
 - High-level (clear on concepts and skills to be developed – *not* contexts)
 - Ordered (concepts are organised logically and based on research into how children learn)
- A school's curriculum should be much broader than what is prescribed, and based on what motivates and excites children, giving autonomy to the teacher and (hopefully) providing enjoyment for the children



3: Support children to take on challenges, rather than make concessions

- Expect all students to work towards the same curriculum that is pitched at a reasonably high level, but alter the amount of help given
- Children's performance is highly correlated with their current level of intelligence, but not defined by it, confirming that teaching quality, parental support and student effort make a difference, too
- Delaying selection seems to improve the results of lower performers without disadvantaging higher achievers (only until 15 years old)
- Teach in mixed-ability classes (until 15 years old)
- Provide **flexible** help in small groups to those with additional needs, AND **flexible** small-group opportunities to 'gifted' children



4: Treat Teachers as Professionals

- Require prospective teachers to undergo a rigorous teacher training programme of at least a year, which is recognised by a professional body and includes the study of pedagogical content knowledge
- **There (increasingly) exists a body of knowledge, derived from research, that teachers ought to know:** child development, cognitive psychology and subject didactics (pedagogical content knowledge)
- Ensure newly qualified teachers have a reduced teaching load, and time with a dedicated mentor who also has a reduced load. Encourage teachers to plan and evaluate lessons in small teams, so that all teachers are pedagogically supported and learn from one another
- Allow teachers to enjoy the benefits of mastery, autonomy and relatedness, which enhance intrinsic motivation



5: Combine school accountability with school support (rather than sanctions)

- Monitor school performance at a local or national level, using school-level data or irregular national assessments
- Make use of, or create, a network of successful former school leaders, to visit schools regularly (such as in Canada's role of the superintendent) and provide practising school leaders with advice, **support**, and connections
- Incentivise demonstrably good teachers and middle leaders to work in struggling schools, and provide pedagogical leadership to other staff.



Effective pedagogy match-up

- Review previous learning
- Use **modelling** and examples, alternating problems with solutions
- Pose probing questions
- Motivate students through praise and positive relationships
- Use **memorisation**, to free up the working memory
- Use **regular low-stakes testing** – trying to remember something makes memory more long-standing than other forms of studying
- Provide feedback, which is regular, clear and purposeful



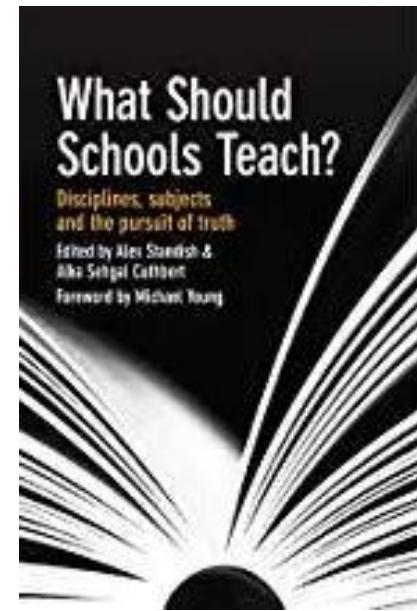
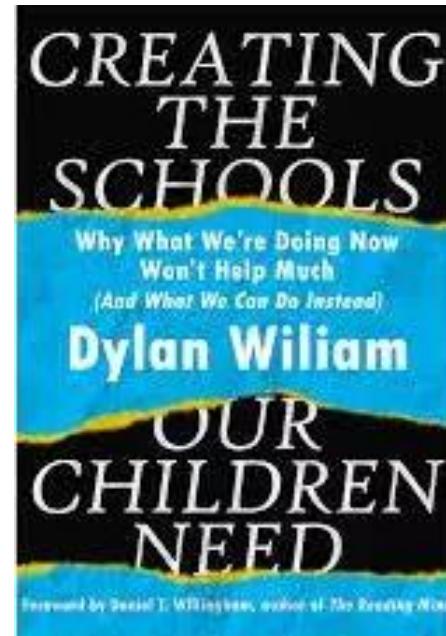
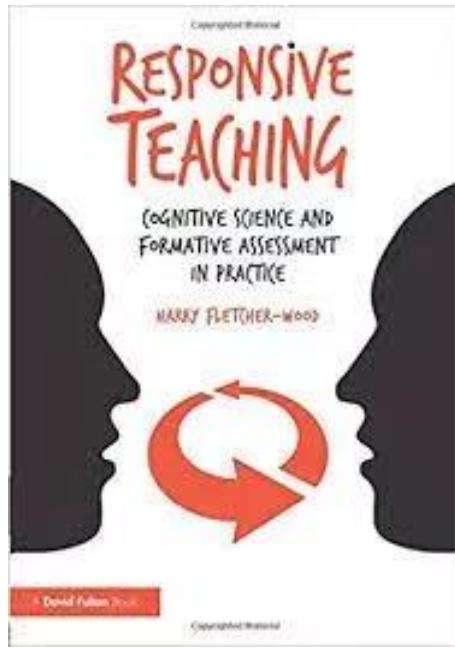
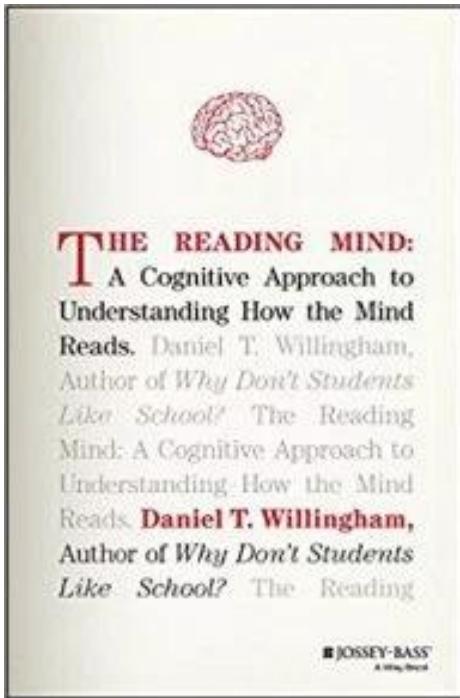
Main Discussion Threads:

Journal Club Meeting, 7th March 2018

- The significant impact of culture on an education system
- The negative impact of being inspected when there is an accountability element
- The importance of good quality teacher training
- The success of a school enjoying the benefits of highly qualified, well supported, collaborative staff who are treated as professionals
- Traditional teaching (and textbooks) enjoying success and a revival?
- How do we promote independent learning (resilience?) at BGS
- The idea of 'superintendants' rather than inspectors
- Negative impact of external examination at 16
- Impact of ability setting

What are we reading next?

Books suggested for 2018-2019



How does Journal Club work?

- **Everyone is welcome**. Members include classroom teachers, Heads of Department, language assistants and members of SLT, from across Infant, Junior and Senior schools. **There is always cheese and biscuits.**
- We read extracts from one book (or one journal article), per term – **so we only meet once a term at 4.15-5.15**, just after the half-term holiday, to allow some holiday time for reading. You are still welcome to join Journal Club even if you can't make every meeting.
- We select texts to be read in future meeting by **voting**; members are encouraged to bring ideas for new texts for us to vote on.
- We **take it in turns to present and chair the meeting** (but you will never have to do this if you don't want to!) After the presentation (which summarises the main threads of the text), we then have a discussion about the research that we have read. It is always fascinating to hear other people's experiences from across the school and how that matches up to the research we have all read.
- Paula then writes up the minutes, **which are disseminated to all teaching staff in the Weekly Bulletin**.