

What? Who? How? Using educational capital.

Abstract: Nowadays many students are hampered in their learning journey by a belief they are constrained by the circumstances around them. This belief means that they justify their perceived shortcomings, overwhelmed by the rightness of their feelings and will not appreciate opposing points of view or the possibility they may be wrong. I aim to shatter those perceptions, helping them dream beyond limits.

Description: I will explore twenty pivotal ideas for effective teaching and learning, developed through many years of experience in education, that illustrate the difficulties faced by so many of our students in the modern world, and provide possible and effective solutions for real growth.

In the recent *Coddling of the American Mind* by Lukianoff and Haidt, they identified three prominent characteristics of the mindset that is invading education and precludes success. These were; that we need to be kept **safe** above all else, we should trust our **feelings**, and anyone who challenges us is the **enemy**. They ended the book by advancing three solutions: students should be encouraged to face challenges, should be freed from cognitive distortions and should take a generous view of other people. My ideas address these and other problems and provide possible solutions that can be readily applied to any teaching practice.

Three Questions:

1. **What is it that we want students to learn so they can dream beyond limits?** Bach in *Illusions*, “people (live) for fun or for learning or for both together.”
2. **Who do I need to be?** Menninger, psychiatrist, “what the teacher is, is more important than what he thinks.”
3. **How do we incorporate effective teaching practices to make this happen?** Holborn Gray - Chicago University President, “education should not be intended to make people comfortable; it is meant to make them think.”

Introduction: Tihei mauri ora. He aha te mea nui o te ao, he tangata, he tangata, he tangata. (What is the most important thing in the world? It is people, people, people.) Ko Whangamoa te maunga, ko Maitai te awa, ko Whakatu te taone, no Richard ahau. (I’m from Nelson, NZ of Viking descent, have taught for 41 years and my name is Richard). He aha te mea nui o te ao, he tangata, he whanaungatanga, he Atua. (What is the most important thing in the world? It is people, it is relationships, it is God.) Tena koutou, tena koutou, tena koutou katoa.

Nigel Latta, NZ author of “Politically Incorrect Parenting” says: if you are easily offended, leave now. But I say, if you are easily offended, you are the ones I need to talk to.

One: Five stages of learning. Illustration of learning to ride a bicycle. 1. Know you can’t. 2. Know you can. (See siblings, mates biking). 3. Try and fail. (Most schooling) 4. Get it; by the way, ever notice that you can’t teach balance, but you “get it” after you have tried and failed enough – different for different people. Many stop there and/or want to go on to another topic, but ... 5. Overlearn. By the way: “know you can’t” – I don’t accept “not” without a “**yet**” on the end.

Two: To take the first of the three focus questions: What do we want students to learn? I hope you will develop your own answers to that. To get you started I offer a provocation: the only thing worth learning is what is true. I’ll come back to that in number 3. For now, I have three hooks to help with learning: **eg?**
Why? So what? Shakespeare, Hopkins, Pythagoras, (Hippasus who brings me to my next point).

Three: There is a mediaeval maxim: Veritas est adaequatio intellectus et rei. When the mind has the same form as reality we think **truth**. So often nowadays we are encouraged to trust our feelings. Heinlein: “What are the facts? Again and again and again – what are the facts? Shun wishful thinking, ignore divine revelation, forget what “the stars foretell,” avoid opinion, care not what the neighbors think, never mind the unguessable “verdict of history” – what are the facts, and to how many decimal places? You pilot always into an unknown future; facts are your single clue. Get the facts!” (I shall return to that in number 7.) By the way, “Solidarity can interfere with a group’s efforts to find the truth, and the search for truth can interfere with a group’s solidarity. ...Thucydides saw this... over two thousand years ago” Coddling. Hippasus. (Warning: challenge people’s irrational beliefs at your peril).

Four: They learn us. What students actually learn, despite our intentions, is us. If we are knowledgeable and enthusiastic about our subject, if we love it, they learn that as well. We can choose to BE (we are human beings not human doings) love, inspiration, leadership, ... and we model what we want. In our classes we remove distractions, we turn up (on time), we make mistakes and own them, we learn new stuff. Choose who you be. Choose carefully. Students spot fakery fast.

Albert Schweitzer “Example is not the *main* thing in influencing others. It is the *only* thing.” Welby Ings in “Disobedient Teaching” said: “As far back as the first century the Roman senator Tacitus recognised that if you want people to work with you, you need to make them like you. ... in the face of opposition you need to become as resiliently humane as possible. ... change has the greatest chance of occurring in an environment where people have been enticed into showing appreciation of each other, even when they disagree”

Five: Tell stories. Naaman and **Rule 1**. 2 Kings 5: 1 – 14. Now Naaman was commander of the army of the king of Syria. He was a great man in the sight of his master and highly regarded, because through him the LORD had given victory to Syria. He was a valiant soldier, but he had “leprosy”.

Now bands of raiders from Syria had gone out and had taken captive a young girl from Israel, and she served Naaman’s wife. She said to her mistress, “If only my master would see the prophet who is in Samaria! He would cure him of his leprosy.”

Naaman went to his master and told him what the girl from Israel had said. “By all means, go,” the king of Syria replied. “I will send a letter to the king of Israel.” So Naaman left, taking with him 340kg of silver, 70kg of gold and ten sets of clothing. The letter that he took to the king of Israel read: “With this letter I am sending my servant Naaman to you so that you may cure him of his leprosy.”

As soon as the king of Israel read the letter, he tore his robes and said, “Am I God? Can I kill and bring back to life? Why does this fellow send someone to me to be cured of his leprosy? See how he is trying to pick a quarrel with me!” (by the way – people often read what is not there)

When Elisha the man of God heard that the king of Israel had torn his robes, he sent him this message: “Why have you torn your robes? Have the man come to me and he will know that there is a prophet in Israel.” So Naaman went with his horses and chariots and stopped at the door of Elisha’s house (tent). Elisha sent a messenger to say to him, “Go, wash yourself seven times in the Jordan, and your flesh will be restored and you will be cleansed.”

But Naaman went away angry and said, “I thought that he would surely come out to me and stand and call on the name of the LORD his God, wave his hand over the spot and cure me of my leprosy. Are not Abana and Pharpar, the rivers of Damascus, better than all the waters of Israel? Couldn’t I wash in them and be cleansed?” So he turned and went off in a rage. (and, to be fair ... the Jordan there is a trickle)

Naaman's servants went to him and said, "My father, if the prophet had told you to do some great thing, would you not have done it? How much more, then, when he tells you, 'Wash and be cleansed'!" So he went down and dipped himself in the Jordan seven times, as the man of God had told him, and his flesh was restored and became clean like that of a young boy.

Then I ask: Shall I read the punchline again? If the teacher had told you to do something difficult, you would have done it; so why don't you do the homework as I say and get Excellence and happy parents.

Six: Wes and emotion. He had read some research that found students learn best if the matter is connected with emotion. Be engaged to be engaging. Learn from everyone, including students. In number 2, I asked what we want boys to learn and gave you 3 hooks. Acknowledge sources. Thank you to David Jiang for the PowerPoint. They came from a Languages conference in Nelson forty years ago. Recently I was at a Maths conference in Wellington. The one idea I got was: at the end of each class survey four students at random: did you learn something; did you enjoy something (and I wanted at least three "yes" answers). More recently Viv suggested I change it to: 2 x what did you learn, what did you enjoy?

Seven: Debate. Number 3 – facts, remember. Students need facts to be connected and relevant and personalised. Get the whole class debating – it's not just a skill for English classes. Choose a topic. Get students to take one of three positions: for, against, undecided. Sit them in those groups. Students may then take turns to speak for or against (undecided may not speak). At any stage someone may change groups. When all for and against have spoken, the undecided must vote (and hence also participate) about the winning side. If all sit on one side, choose a new topic. Starter example: people achieve best when they are more concerned about others than themselves. (Teachers' College)

Eight: Reward. Bribery works. Four days of great effort and "keeping up with the other three classes" wins a day of playing chess or doing mathematics on the computers. (Never mind that the prizes are more work and/or learning). Boys love competition. Have prizes (jelly beans, stickers). Prizes also are not necessarily for winning. When in winter they want to leave their coats on in class I will allow it if they can beat me in a push up competition. I emphasise that I am a grandparent so we must go slowly and together. Mostly they lose, but when I was beaten the boy was so warmed up that he needed to take his coat off.

Nine: Punishment. Punishment seldom works. Natural consequences. Answers with errors. My own marking system. Tick, exclamation mark, question mark. Learning is a "confidence" game. Lots of ticks helps build confidence.

Ten: Contradictions. Proverbs are in opposite pairs. Many hands make light work/Too many cooks spoil the broth. (In Economics these are called Economies of Scale and Diminishing Returns to Scale). Be willing to live with paradox. It is always too late to start again. Start the year right, start the day right, start the class right. It is never too late to start again. "Sorry, that didn't work for me/you. Start again". Always say "no" first (you can change "no" to "yes" later, but not the other way around: "can I go to the toilet: "No"; I'm busting: "Yes"). Always say "yes" first: "can I go get a drink"; "yes, after class".

Eleven: Ask great questions and encourage questions – thank you for that intelligent question (they are all intelligent questions). Allan J Rossman of Cal Poly, USA has "a three-word teaching philosophy: Ask Good Questions" and the 100 posts on his AskGoodQuestions blog are very helpful for introductory university statistics and hence for teachers aiming students towards that. If you need some ideas, go back to Number 2: eg? Why? So What? "Ask" is also Rule 9 of my 10 commandments.

Twelve: Spend time practising. By the way, allow time to think, play, make mistakes.

Swanson School in Auckland: Do we really have to get exactly that much learned today and this much tomorrow?

Coddling quotes Haim Ginott: "Don't just do something, stand there." **Practise**. This is rule 10 of my ten. It is an imperative verb. Remember the fifth stage of learning.

Wood Butcher on Quora: (Socrates said "Be as you wish to seem." Is it truly that easy? What stops us from being what we want?)

Socrates' quotation to be as you wish to seem put me in mind of an old partner of mine. He told me that it is not enough to be honest; we must be double honest. I said that seemed absurd, and he explained. Being honest is being honest with others. Being double honest is being honest with myself, and that is the hard part. Be as I want others to see me. Live with integrity so that how I see myself is also how others see me.

This is not easy. It is simple but not easy.

Integrity is rooted in the word integer. The number is one. Not some fraction. If I have integrity, then the things I do are not masked or hidden to give a false impression of who I am. I am one. One person. The way I am is also the way I seem.

What stops us? If anything, it is the deep-seated fear that I am not like other people. I come to this opinion, because I compare myself with what I see of others. I compare my inside with their outside. And because I think I am so different, I fear that they will reject me if they ever find out what I am really like. It is not easy to open the windows of my life. But once done, living is much easier and happier.

Edit: Revision. Thanks for the upvotes, but on reconsideration, I'll add something.

Most of us think we can change our life, if we just figure out first what we want to change it to be. This really doesn't work at all. If I want to change my life, I must pick some small thing — and PRACTISE it. Practise. Practice makes progress. Baby steps.

So, pick something small. Make your bed every morning. Smile at people you don't know. Make some sandwiches and give them to homeless people. Or give them socks, because it's cold outside. Tell a small truth, when you're tempted to lie. Help an old lady across the street. Take up an activity you've been thinking about. If you hurt someone, tell them you understand what you did, and think about not doing it again.

If I keep going, I'll start to babble. You have the idea. Practice being one tiny part of the person you wish to be. Soon enough, you will be that person, and others will see that. Looking back, you will be amazed at the change in you.)

Thirteen: Sell the **thinking** process at the start of the year. Hanna Holborn Gray - Chicago University President, "education should not be intended to make people comfortable; it is meant to make them think." I say to boys: Administrators are required to set targets for exam results and so forth. My aim is to encourage you to think for yourselves. A nice bonus is that if you do, you will also get the good grades the school and your parents are looking for. Encourage "learning". Provocation: Nothing worth learning can be taught. Oscar Wilde. Dr Tassos Anastasiades: "Based on my experience: collaborative, evidence-based professional conversations amongst teachers on a daily basis using evidence-driven strategies, have most impact on learning. ... discuss collectively student progress, creatively and do what matters most to the learners leads to real learning, resulting in real student progress, and learning that is meaningful and will stay with our students just like it did when they learnt to walk and you learnt to drive.

T N Duening: Education is aspirational rather than operational.

Rodin himself best described *The Thinker* - "what makes my Thinker think is that he thinks not only with his brain, with his knitted brow, his distended nostrils and compressed lips, but with every muscle of his arms, back, and legs, with his clenched fist and gripping toes."

I shall return to that in number 20.

Fourteen: Seek challenge and encourage it. The Coddling of the American Mind by Greg Lukianoff and Jonathan Haidt “you will be happier, healthier, stronger, and more likely to succeed in pursuing your own goals if you ... seek ... out challenges (rather than eliminating or avoiding everything that “feels unsafe”), free ... yourself from cognitive distortions (rather than always trusting your initial feelings), and take ... a generous view of other people and look for nuance (rather than assuming the worst about people within a simplistic us-versus-them morality). (Poem “We and They” – Kipling)

Boys should not be coddled. “... china teacups are fragile: they break easily and cannot heal themselves, ... other things are resilient: they can withstand shocks (plastic cups) ...some things are antifragile, like our immune systems: they require stressors and challenges in order to learn, adapt and grow. Systems that are antifragile become rigid, weak and inefficient when nothing challenges them or pushes them to respond vigorously ... muscles, bones and children are antifragile”.

A provocation: “do not handicap children by making their lives easy”. (Heinlein again). Set challenges: The guy who coached Daley Thompson pole vault taught me how to coach Shot put: three marks on the ground: 1 easy, 2 middle, and 3 those guys can come back for competition training. Redefine “pass” and “fail”: pass = 100%, fail = 0% (NZ: Achieved = 30%, Merit = 70%, Excellence = 90%). Who wants a bridge that is 30% safe?

Despite what William Pike said: Grahame Dingle founder of Outdoor Pursuits Centre NZ: If we eliminate real risk, we are actually less safe. In the outdoors, the real risk of physical harm keeps us focused on doing what we need to do to be safe.

Motorcycles in Vietnam (news item Feb 2023): “the risk turned out to be mitigated by a culture of trust and understanding.”

Challenge yourselves – which leads me to:

Fifteen: “We love self-answering questions” has become a mantra of mine. Rule 3 of my 10 is Keep It Super Simple. My answer to a student’s question is often a sequence of questions starting with a simple one the student knows the answer to and working through harder questions that build up confidence (education is a confidence game) in ability to work out problems himself and finishing with the question he asked, which he can now answer himself. This is not an “exact science”. Sometimes I need to insert supplementary questions, sometimes others can join in. I have had many years practice. Some students hate this (I tell them that every ten years or so a student comes back to me and says “I hated what you did with that, and it works, keep doing it”). Coddling: “...ask a series of questions” encouraging the student to ground assertions in textual evidence and consider alternative interpretations. Over time ... improve the critical thinking skills of all students”.

Sometimes, especially these days, I will ask a question to which I do not have an answer. I’ll address that in number 17, but first:

Sixteen: 10 commandments (of maths). By the way, some people live their lives as if the 10 commandments were the ten suggestions. 1. R. T. . I. (Naaman) 2. DiagramS 3. K.I.S.S. (self-answering questions) 4. Brackets 5. Patterns 6. $\alpha\theta\omega\chi\sigma\theta$ 7. Check 8. State the obvious 9. Ask 10. Practise. We humans think in pictures, so diagrams are really useful. We learn new things by small steps, so often lots of diagrams in sequence will be better than just one. Our brains love patterns, so patterns of pictures are good – sorry I’m not great at pictures myself, **yet**, so you will need to make your own.

Seventeen: Learn something and let students see you **struggle**. When I ask a question, I haven't previously worked out, I can show them the processes to go through, the dead ends, re-working, the solution that is not a "nice" simple textbook one, the proof that there is no possible solution. When they know I have been learning Te Reo and struggling with it as they struggle with their maths there is a modelling I referred to in number five when I said "they learn us".

Eighteen: **Humour** and manners. I teach mathematics, so I do not have a sense of humour. Actually, I'm on the autism spectrum, so I really do struggle with humour. I insist on manners in class: "casual clothes day" is not "bad manners day", so I insist they take their hats off in my room. If I overhear "piss off" or similar, I will in all seriousness insist: "excuse me, my classroom, manners, it's "piss off, please". It is gratifying to overhear them in the playground telling their mates the same thing.

Nineteen: **Read** and insist that students read. Real books, not just screens – was a take away message from IBSC Conference in Texas. Inspiring Each Other: Surviving 65 Years in the Education System by Philip Jeffreys (Feilding High School, NZ) 54 pages "the shortest possible extended text of all time": "...You want to teach kids to think critically. If they don't read, they're going to find thinking critically quite difficult". Remember my point number five: tell stories. If you don't have stories to tell them, **yet**, read them some good ones that others have written; model reading stories to them, with asides and comments and "by-the-ways".

Twenty: Enoka Waitai: "give them salt". Be a **coach**. "A coach is someone who gets you to do what you don't want to do so you can be who you have always wanted to be"

e.g. Who likes chocolate? Who wants some chocolate? Who wants this chocolate?

The point is that liking something or wanting something will not get it for you; you have to get up outside your comfort zone and use your thirst to take opportunities when they come along. As Sir Ian Taylor's son Ben said: "You've got to get out of bed"

Agora school in Roermond, Netherlands,

It is the job of the teacher – who here is called a coach – to challenge and guide that exploration process. The staff, who are responsible for around 17 students each, also have to ensure there are tangible results and genuine development, as well as work with each student on ways to continue developing the learning journey.

"But everyone can learn this, anyone can do this." (Stages of learning #2)

Disobedient Teaching by Welby Ings "Change is possible, and ordinary people achieve it. ... People who think about things and imagine richer horizons"

"Seven useful things ... to take away in your back pocket. **First**, if you want great teachers you have to trust them. ... **Second**, ... the measure of performance is *not* the measure of learning ... (though there is a correlation)... **Third**, ... to grow ... more creative people ... build worlds where they can trade beyond experience. ... Creative thinking is normal, and learning is emotional as well as cognitive. It is fed by intimacy and passion and care. ... **Fourth**, you *can* change things. ... by example. ... **Fifth**, ... put your energy into growing and empowering others. ... **Sixth**, people ... will respond to your interest in them. ... And **finally**, question bravely and constructively. Stand up for ideas. Be tenacious. Take courage. Disobey. ... believe in yourself. Disobedient Teaching

Reading list and quotations:

The Coddling of the American Mind by Greg Lukianoff and Johnathan Haidt

Illusions by Richard Bach

Karl Menninger, psychiatrist, "what the teacher is, is more important than what he thinks."

<https://taskandpurpose.com/news/university-chicago-tells-freshmen-will-no-safe-spaces/#:~:text=Former%20President%20Hanna%20Holborn%20Gray,meant%20to%20make%20them%20think>. Hanna Holborn Gray – former Chicago University President, "education should not be intended to make people comfortable; it is meant to make them think."

Politically Incorrect Parenting by Nigel Latta

Time Enough For Love by Robert Heinlein

Albert Schweitzer "Example is not the *main* thing in influencing others. It is the *only* thing."

Disobedient Teaching by Welby Ings 2007

2 Kings 5: 1 – 14 The story of Naaman

AskGoodQuestions blog by Allan J Rossman of Cal Poly, USA

<https://www.sbs.com.au/news/article/the-school-with-no-rules/yfyi2vyvy> Swanson School in Auckland, NZ

Quora (website): Wood Butcher quotes Socrates : "Be as you wish to seem."

<https://www.linkedin.com/pulse/learning-dr-tassos-anastasiades/> "Based on my experience: collaborative, evidence-based professional conversations amongst teachers on a daily basis using evidence-driven strategies, have most impact on learning. ... discuss collectively student progress, creatively and do what matters most to the learners leads to real learning, resulting in real student progress, and learning that is meaningful and will stay with our students just like it did when they learnt to walk and you learnt to drive."

Research evidence: <https://www.jstor.org/stable/27565268> Peter Kugel (Plato, Kierkegaard, Wild, Carl Rogers)

<https://philosophyofflourishing.wordpress.com/2018/10/08/nothing-worth-learning-can-be-taught/> T N

Duening: Education is aspirational rather than operational.

<https://www.widewalls.ch/magazine/rodin-the-thinker> "what makes my Thinker think is that he thinks not only with his brain, with his knitted brow, his distended nostrils and compressed lips, but with every muscle of his arms, back, and legs, with his clenched fist and gripping toes."

"We and They" poem by Rudyard Kipling

"Do not handicap children by making their lives easy". Robert Heinlein (in "The Quotable Teacher" (2003) edited by Randy Howe).

Surviving 65 Years in the Education System by Philip Jeffreys (Feilding High School, NZ)

<https://medium.com/pi-top/meet-the-school-with-no-classes-no-classrooms-and-no-curriculum-7cc7be517cef> Agora school in Roermond, Netherlands

Oscar Wilde "A dreamer is one who can only find his way by moonlight, and his punishment is that he sees the dawn before the rest of the world."