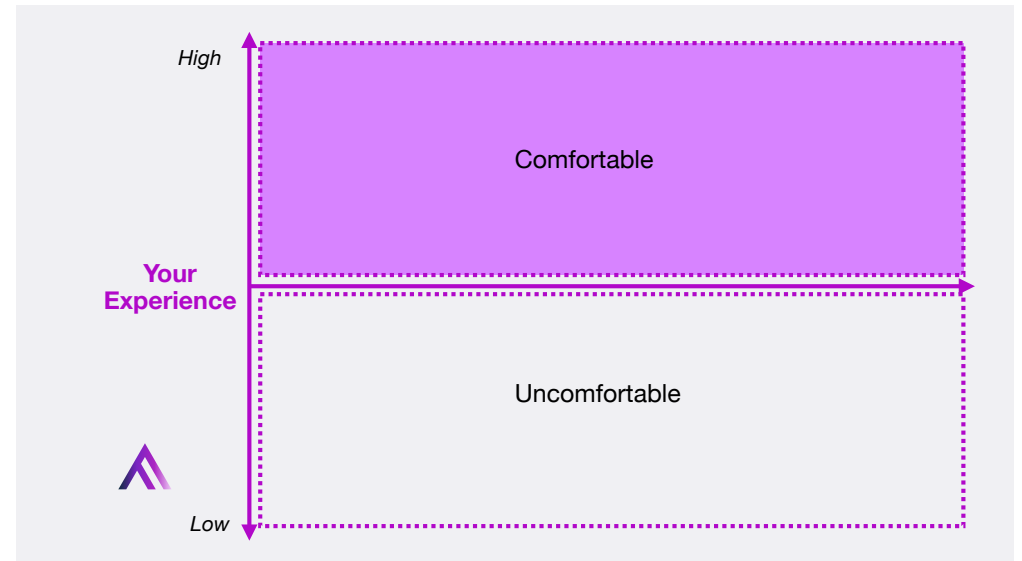


<https://kyla.substack.com/p/the-most-valuable-commodity-in-the>

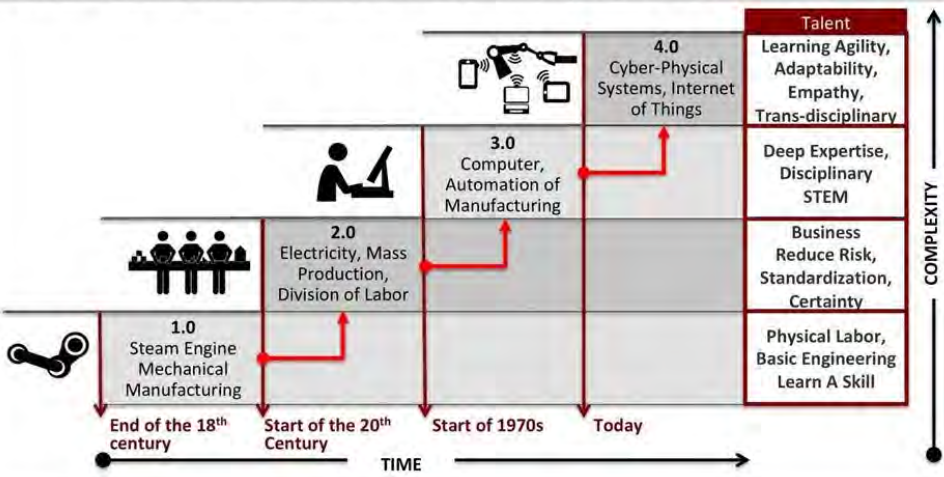




How often do we protect our young people from our own uncomfortableness?

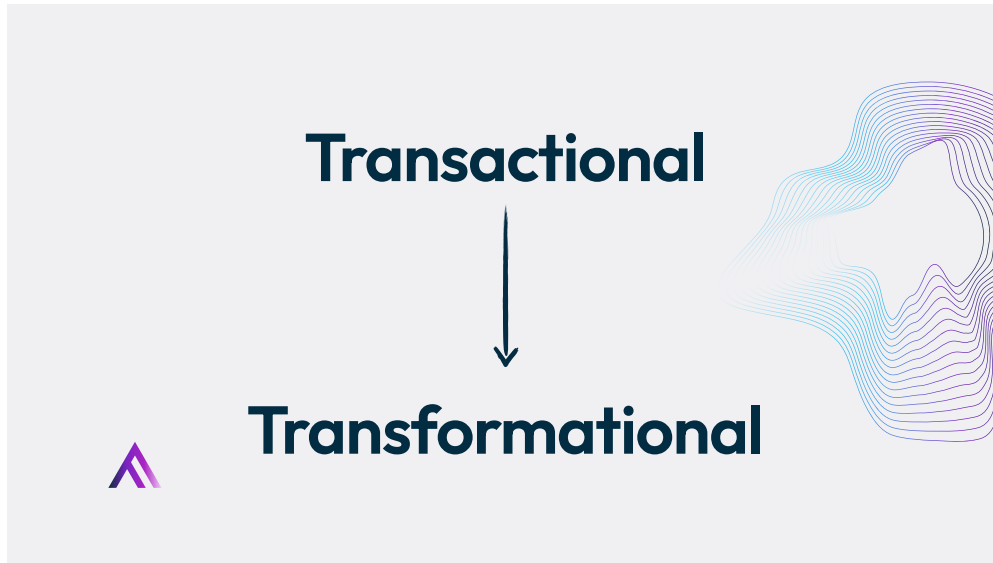


Future of Work: 4th Industrial Revolution (World Economic Forum)



www.heathermcgowan.com | www.futureislearning.com





Future of Jobs Report 2025
Largest growing and declining jobs by 2030



Top largest growing jobs		Top largest declining jobs	
1	Farmworkers, labourers and other agricultural workers	1	Cashiers and ticket clerks
2	Light truck or delivery services drivers	2	Administrative assistants and executive secretaries
3	Software and applications developers	3	Building caretakers, cleaners and housekeepers
4	Building framers, finishers and related trades workers	4	Material-recording and stock-keeping clerks
5	Shop salespersons	5	Printing and related trades workers
6	Food processing and related trades workers	6	Accounting, bookkeeping and payroll clerks
7	Cat, van and motorcycle drivers	7	Accountants and auditors
8	Nursing professionals	8	Transportation attendants and conductors
9	Food and beverage serving workers	9	Security guards
10	General and operations managers	10	Bank tellers and related clerks
11	Social work and counselling professionals	11	Data entry clerks
12	Project managers	12	Client information and customer service workers
13	University and higher education teachers	13	Graphic designers
14	Secondary education teachers	14	Business services and administration managers
15	Personal care aides	15	Claims adjusters, examiners, and investigators

Note: The jobs for which employment figures are expected to increase or decrease the most in real terms by 2030.
 Source: World Economic Forum, (2025), Future of Jobs Report 2025.

Future of Jobs Report 2025
Fastest growing and declining jobs by 2030



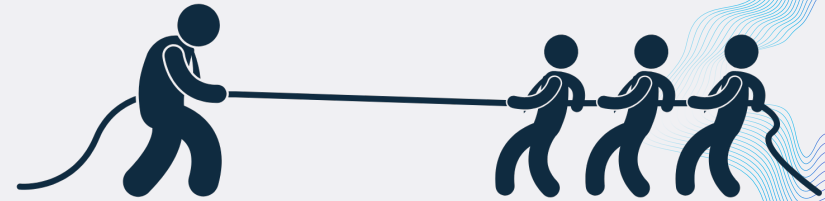
Top fastest growing jobs		Top fastest declining jobs	
1	Big data specialists	1	Postal service clerks
2	FinTech engineers	2	Bank tellers and related clerks
3	AI and machine learning specialists	3	Data entry clerks
4	Software and applications developers	4	Cashiers and ticket clerks
5	Security management specialists	5	Administrative assistants and executive secretaries
6	Data warehousing specialists	6	Printing and related trades workers
7	Autonomous and electric vehicle specialists	7	Accounting, bookkeeping and payroll clerks
8	UI and UX designers	8	Material-recording and stock-keeping clerks
9	Light truck or delivery services drivers	9	Transportation attendants and conductors
10	Internet of things specialists	10	Door-to-door sales workers, news and street vendors, and related workers
11	Data analysts and scientists	11	Graphic designers
12	Environmental engineers	12	Claims adjusters, examiners and investigators
13	Information security analysts	13	Legal officials
14	DevOps engineers	14	Legal secretaries
15	Renewable energy engineers	15	Telemarketers

Note: The jobs that survey respondents report the highest and lowest net growth (%) by 2030.
 Source: World Economic Forum, (2025), Future of Jobs Report 2025.

↑ Top fastest growing jobs	↓ Top fastest declining jobs		
1	Big data specialists	1	Postal service clerks
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6	Data warehousing specialists	6	Printing and related trades workers
7	Autonomous and electric vehicle specialists	7	Accounting, bookkeeping and payroll clerks
8	UI and UX designers	8	Material-recording and stock-keeping clerks
9	Light truck or delivery services drivers	9	Transportation attendants and conductors
10	Internet of things specialists	10	Door-to-door sales workers, news and street vendors, and related workers



**It's not what you know. It's
what you can do with what
 you know.**



Engaged Learner

Compliant Learners



Comfortable

Predictable

Transactional



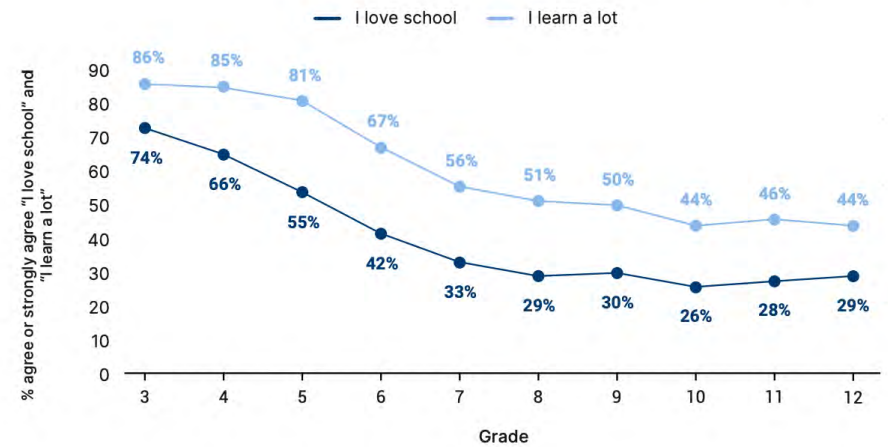
Uncomfortable

Transformational

Unpredictable



Percent of students who report: "I love school" and "I am learning a lot" by grade



Student attendance level for Years 1-10 students in all schools in Australia, time series



Student attendance level for Years 1-10 students in all schools by ICSEA quarters in Australia, time series

ICSEA quarters	2018	2019	2020	2021	2022	2023	2024	2025
1st Quarter	62.1%	59.3%	-	53.6%	36.5%	45.4%	44.0%	45.4%
2nd Quarter	71.2%	68.4%	-	64.4%	45.0%	54.9%	53.2%	54.9%
3rd Quarter	76.1%	73.7%	-	72.2%	49.3%	61.7%	60.3%	62.1%
4th Quarter	83.4%	81.5%	-	82.3%	59.1%	72.3%	69.9%	72.8%

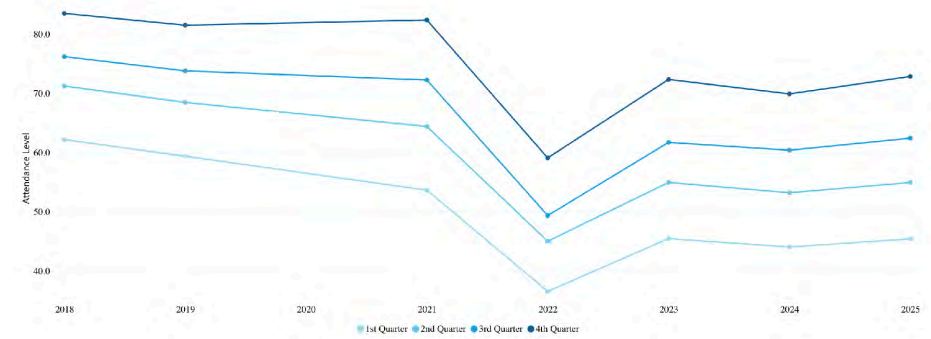
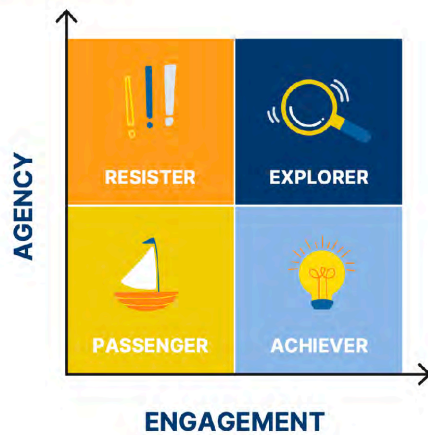


FIGURE 1

The Four Modes of Engagement



© Anderson & Winthrop, 2025

“...student motivation is the internal desire or the why a student wants to do something, student engagement is how that motivation translates into what students actually do, think, feel and initiate.”

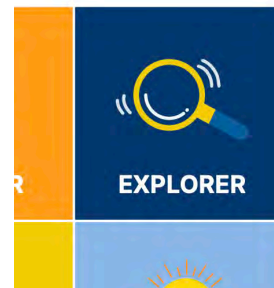
Students in Resister mode “use what power they have to let you, and their teachers, know school is not working for them. They avoid or disrupt their learning, refuse to do homework, derail class, and skip school. These signals are usually obvious to see but often mask feelings of inadequacy which can be hard to understand and require work to reverse.”



Students in **Passenger** mode “are coasting in low gear, showing up, doing the bare minimum, sometimes bringing home high grades, but never fully engaging in their work. They are uninterested in what is taught, and at risk of not developing the learning habits necessary to navigate school and work.”



Students in **Achiever mode** “seem like they are at the top of the engagement mountain. They are highly motivated and expend tremendous energy doing well in school, getting top marks on exams and studying for hours on end. Teachers love them and encourage them. But they are often fragile. Achieving becomes all about grades. So much focus on the destination means they fail to spend any of the journey figuring out what matters to them. Endless praise makes them risk averse. Why stretch themselves if they could fail?”

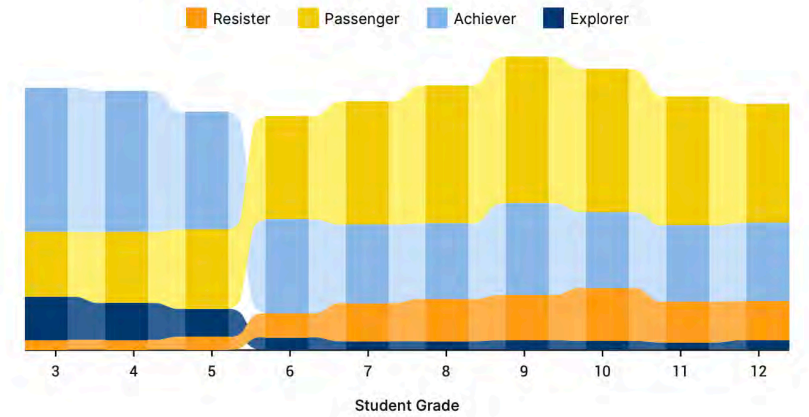


Students in **Explorer mode** are at the actual pinnacle of the engagement mountain, getting good grades but are also “resilient learners who build skills that help them thrive: They achieve but don’t wilt when trying new things or stumbling a bit along the way. They feel confident enough to colour outside the lines, flexing their creativity skills by proactively generating their own ideas to solve problems in school or on the sports field. They are deeply involved and engaged in their learning, finding meaning amid the hard work.”



FIGURE 4

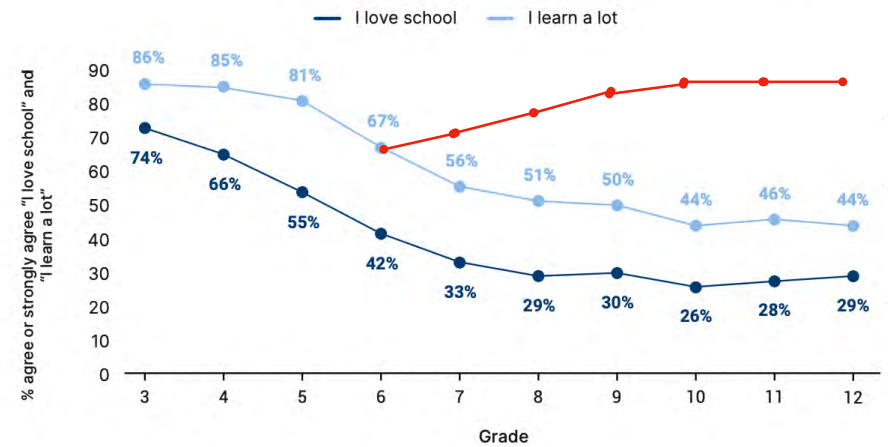
Learning Experiences by Mode of Engagement and Grade



What would learning need to look like to flip the engagement script?



Percent of students who report: "I love school" and "I am learning a lot" by grade



36

To thrive in a future we cannot fully predict, young people need to build a wide range of knowledge, skills, and mindsets. Disengagement makes it hard to do this. Learning experiences that truly engage students are one of the best ways to prepare young people to navigate and shape their path forward—in work, life, and citizenship.



Expectations of Teachers



Needs of Young People

Expectations of Teacher

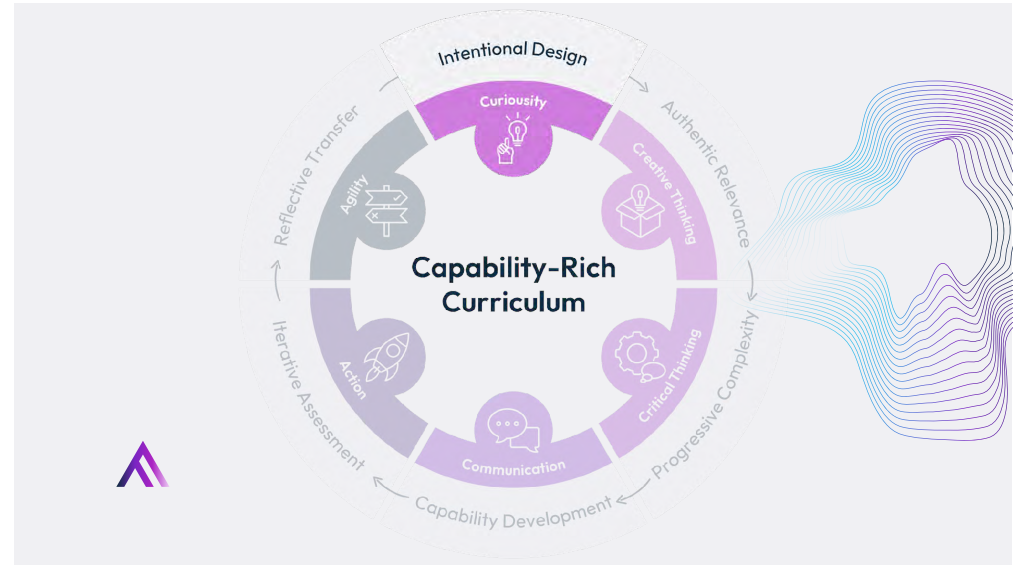
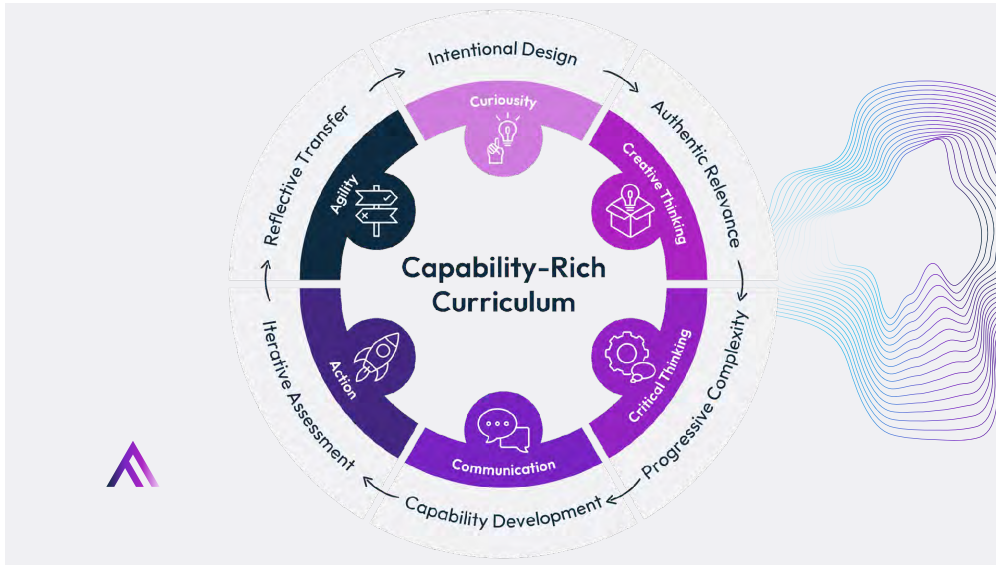
Pedagogy



Needs of Young People



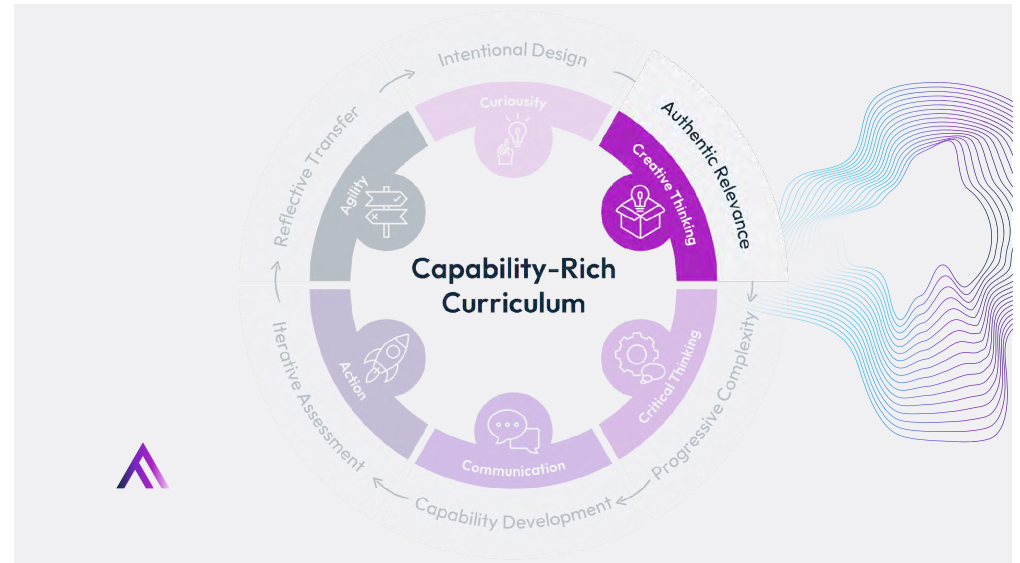
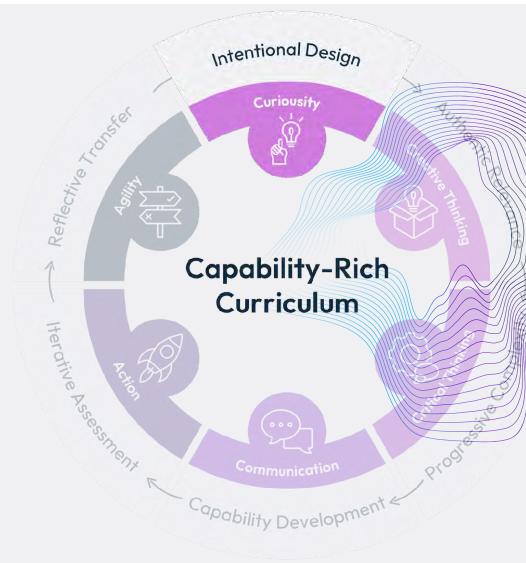




Learning is planned with the end in mind. Drawing on Understanding by Design (UbD), we identify the knowledge, skills and evidence of learning first, then design the sequence of experiences that will deliberately build towards them.

In practice, this means we:

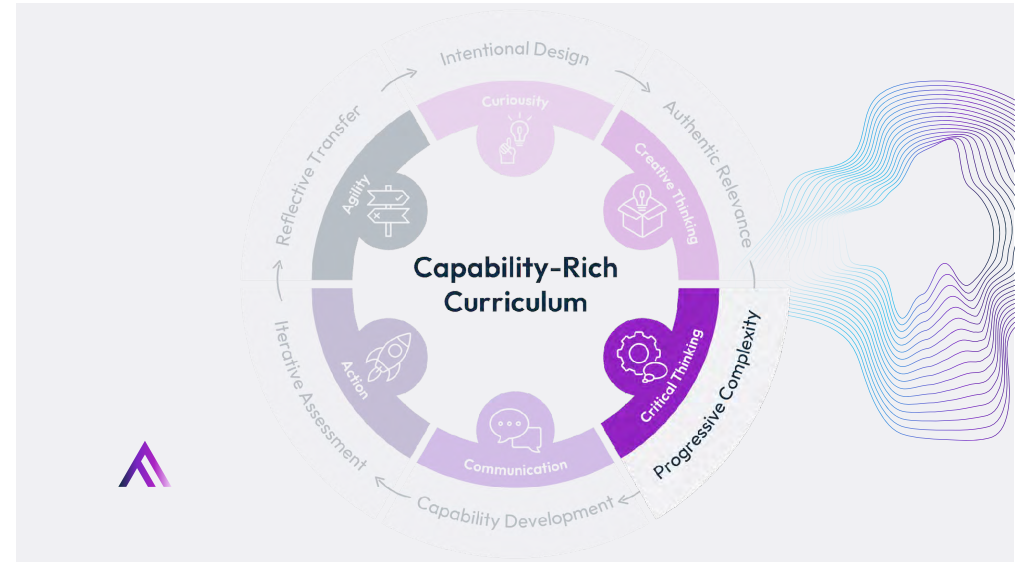
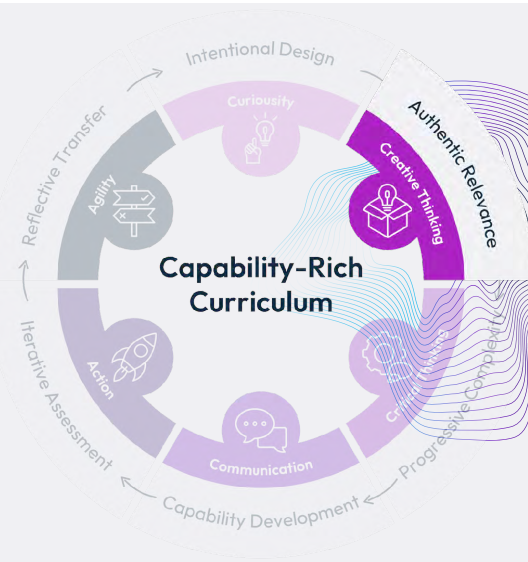
- Unpack curriculum to identify the assessable outcomes
- Identify key learning intentions and success criteria
- Backward map learning across a unit plan



Learning is anchored in a compelling purpose that connects curriculum to the real world. Drawing on Gold Standard PBL, we frame units around meaningful questions and authentic contexts that give students a reason to care.

In practice, this means we:

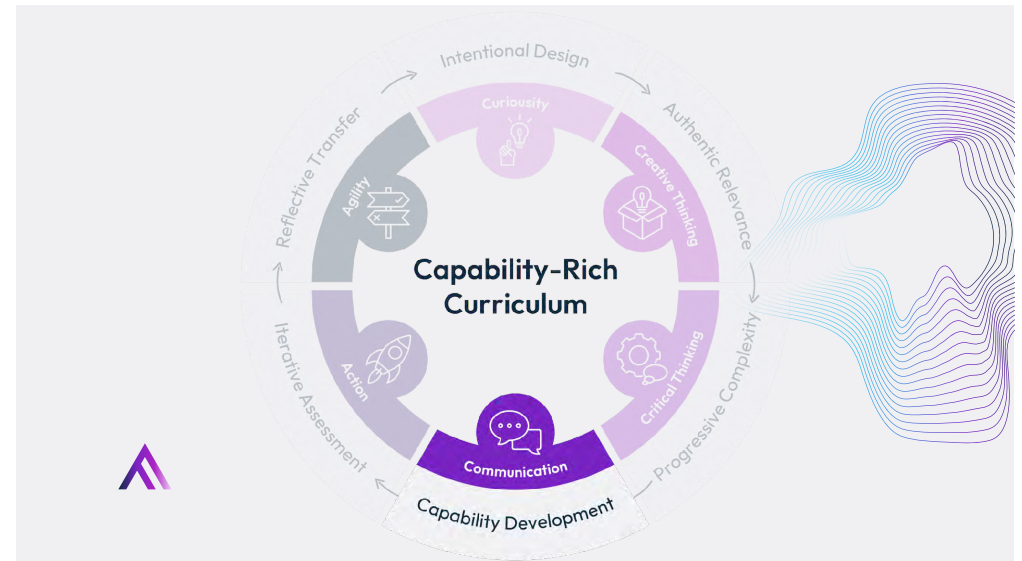
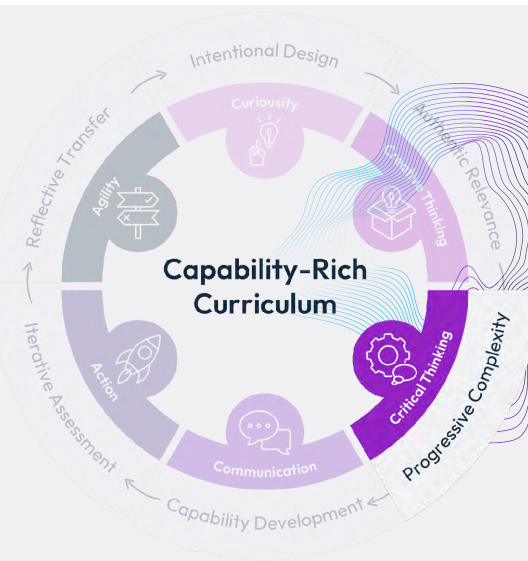
- Frame each unit with a rigorous driving question
- Weave real-world links, case studies, experts or contexts throughout the learning
- Launch the unit with an inciting incident that sparks curiosity and connection



Learning builds in deliberate phases, increasing cognitive demand from surface knowledge to deep understanding and transfer. Informed by gradual release of responsibility, complexity is scaffolded so challenge rises as independence grows.

In practice, this means we:

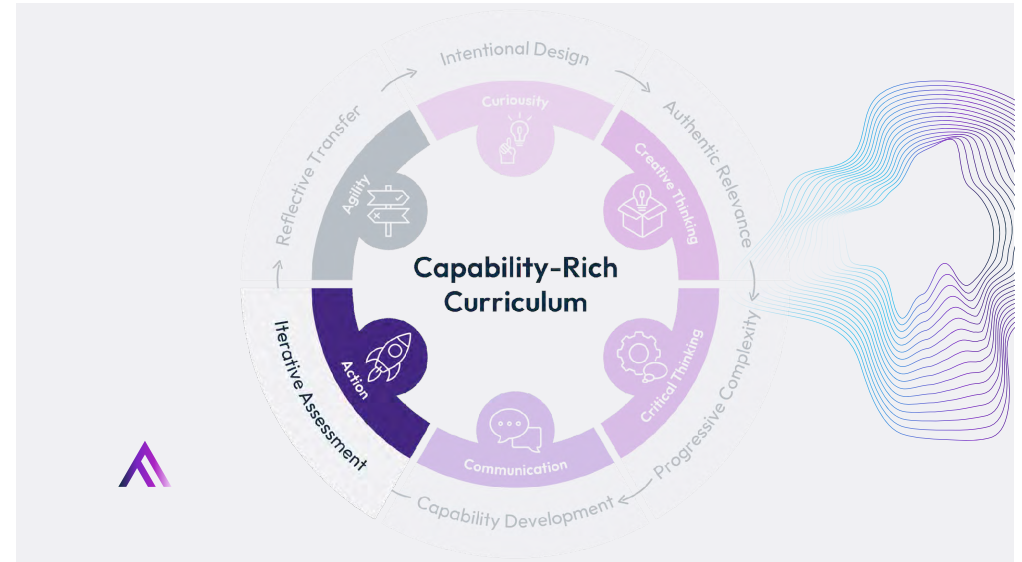
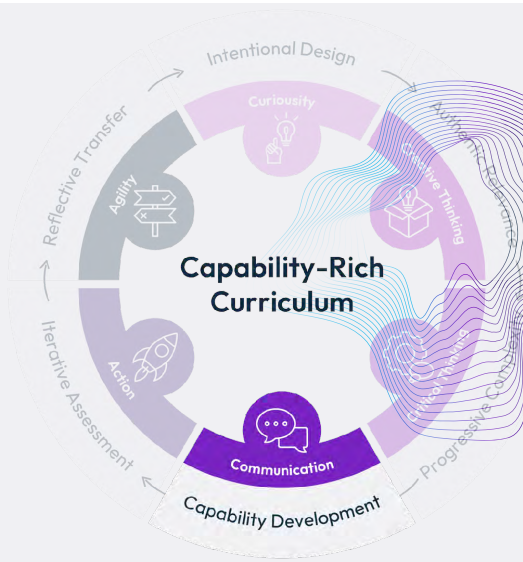
- Sequence learning from surface to deep to transfer
- Increase cognitive demand while maintaining a culture of safety and high expectations through 'seeding success'
- Explicitly build in 'productive friction'; creating space for stretch and growth



Transferable capabilities are deliberately targeted and developed through the Future Anything Capability Framework. Drawing on entrepreneurial pedagogy, capabilities are explicitly taught, practised and reflected upon so growth becomes visible.

In practice, this means we:

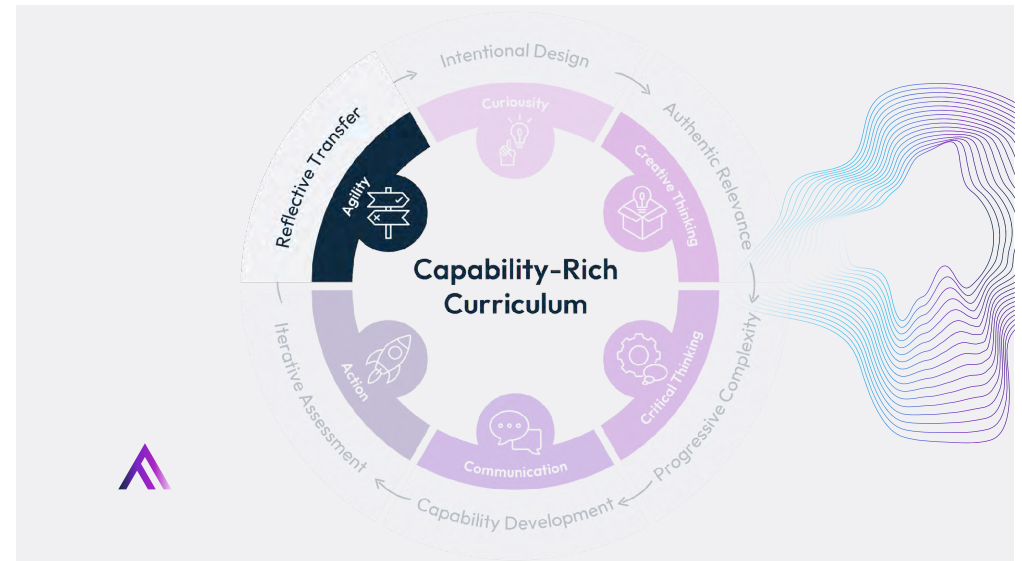
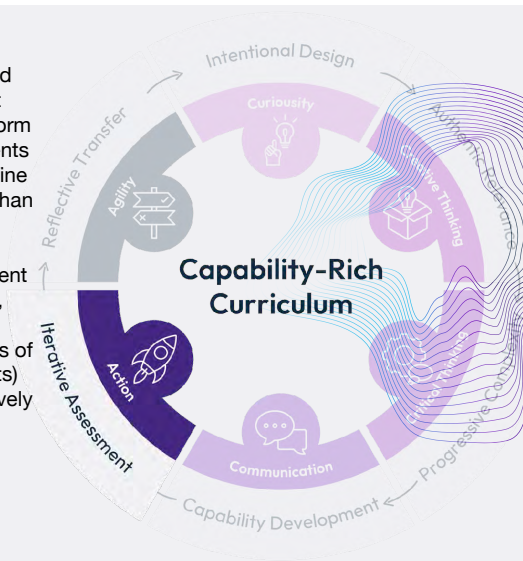
- A target capability is selected that aligns to the unit outcomes
- Weekly micro-challenges are embedded that deliberately strengthen the target capability
- Students collect evidence of growth to support students to reflect on their development



Assessment is designed as Authentic Mixed Method Assessment (AMMA): a cycle that synthesises multiple forms of evidence to inform learning and improvement in real time. Students prototype, receive structured critique and refine their work through sustained iteration rather than one-off submission.

In practice, this means we:

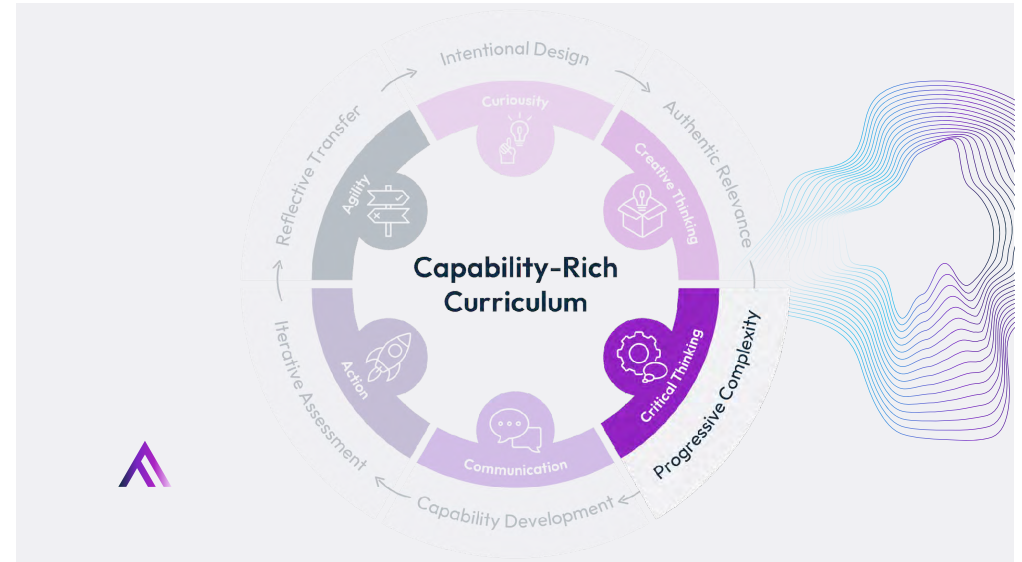
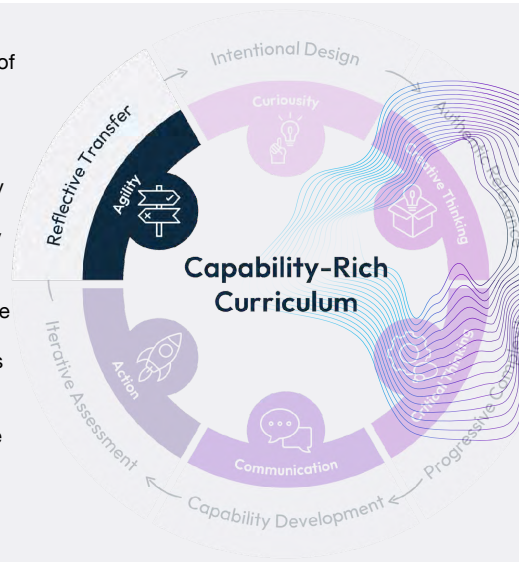
- Design authentic, mixed-method assessment tasks that blend performance, interview, rubrics and other evidence sources
- Build multiple feedback loops and iterations of major work (e.g., at least three refinements)
- Use portfolio “learning peaks” to progressively increase complexity across the unit



Learning culminates in a public celebration of learning. Reflection is deliberately woven throughout the learning journey and made explicit at its conclusion. Research into metacognition and transfer shows that students are more likely to retain and apply learning when they analyse what worked, what didn't, what they would do differently and why it matters beyond the task.

In practice, this means we:

- Design assessment for a public showcase or authentic audience
- Embed structured reflection checkpoints across the unit and explicitly at the end
- Guide students to articulate how their learning transfers to future study and life



Design for Efficiency



Design for Friction

Design for Efficiency



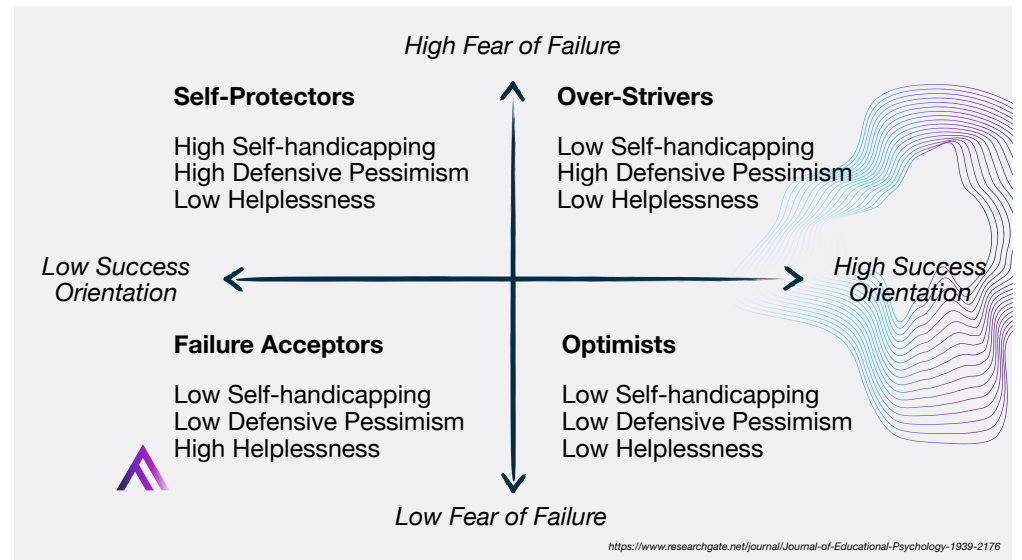


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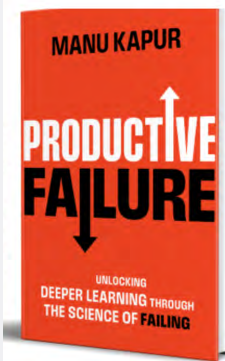
What's the learning equivalent of 'skinned knees'?



Engineer for failure.



Engineer for productive failure.



Examining Productive Failure, Productive Success, Unproductive Failure, and Unproductive Success in Learning

Manu Kapur

Pages 288-299 | Published online: 07 Apr 2016

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Abstract

Learning and performance are not always commensurable. Conditions that maximize performance in the initial learning may not maximize learning in the longer term. I exploit this incommensurability to theoretically and empirically interrogate four possibilities for design: productive success, productive failure, unproductive success, and unproductive failure. Instead of only looking at extreme comparisons between discovery learning and direct instruction, an analysis of the four design possibilities suggests a vast design space in between the two extremes that may be more productive for learning than the extremes. I show that even though direct instruction can be conceived as a productive success compared to discovery learning, theoretical and empirical analyses suggests that it may well be an unproductive success compared with examples of productive failure and productive success. Implications for theory and the design of instruction are discussed.

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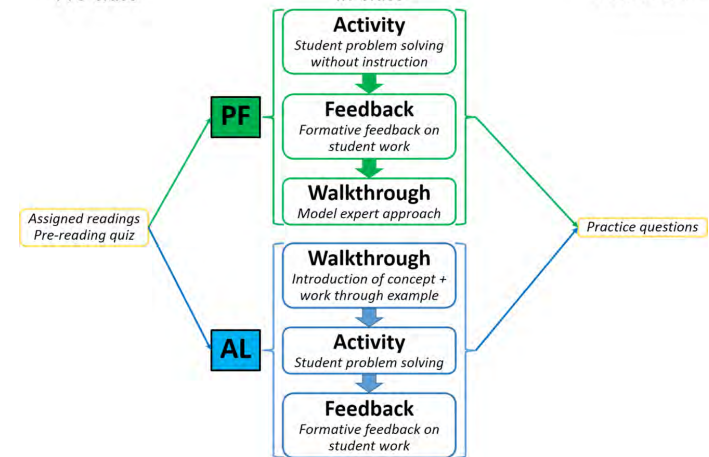
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Pre-class

In-class

Post-class



Engineer for **productive**
friction.

