The Joy Of Learning
The Joy Of Assessment
CHIJ (Katong) Primary
P3 Assessment Briefing

The Future is Now: Embracing opportunities to develop 21st Century Competencies

https://www.weforum.org/videos/these-are-the-skills-kids-will-need-in-the-future/

https://www.weforum.org/videos/20265-this-is-what-we-need-to-teach-our-children-for-the-jobs-of-tomorrow/

The Future Of Learning

Setting the Context For

The Future Of Assessment

The Future of Education

"The new education must teach the individual how to classify and reclassify information, how to evaluate its veracity, how to change categories, when necessary, how to move from the concrete to the abstract and back, how to look at problems from a new direction – how to teach himself. ***Tomorrow's illiterate will not be the man who can't read: he will be the man who has not learned how to learn***"

Herbert Gerjuoy, Psychologist, as quoted in Toffler's *Future Shock* (1970)

Setting the context

OUR MISSION STATEMENT

We, at CHIJ (Katong) Primary, believe in the creation of a Christ-centred school community where all work together for the promotion of truth, justice, freedom and love, with special reference to the needs of persons who are disadvantaged in any way.

OUR VISION

From girls to women of grace and substance

OUR MOTTO

"Simple in Virtue, Steadfast in Duty"

OUR VIRTUES

Self-Discipline
Compassion
Respect
Integrity

Our Vision and Virtues

Women of Grace and Substance

Student Perspective		
Women of Grace	Respect	Is humble
		Respectful of self.
		Respectful of others.
		Respectful of school and environment.
Women of Substance	Self – Discipline	Faces challenges with resilience and adaptability.
		Has the discipline to stand up for what is right.
		Is prayerful.
		Has a strong sense of self.
		Is self – directed in what she wants to achieve for her life.
		Has a mindset of inquiry.
		Steps out of comfort zone and innovates to make a positive difference to the lives of others.
	Compassion	Supports all in the community regardless of their differences.
		Believes in the worth and dignity of each person.
		Is empathetic and sensitive to the feelings, thoughts, and experiences of another.
		Actively contributes to the community, especially to the last, the least, and the lost.
		Has a strong sense of service.
	Integrity	Has a strong moral compass and knows what is right and wrong.
		Is honest.
		Has the moral courage to stand up for what is right.
		Communicates thoughts, opinions and ideas with passion and sincerity.

Important Changes to the system to support the holistic development of our children

A lot has changed... and will continue to change

Age of information and misinformation

Globalisation and increased interconnectedness

Rapid technological advancement

Changes in employment landscape

Desired Outcomes of Education

- **Confident persons** who have a zest for life, have a strong sense of right and wrong, are adaptable and resilient, know themselves, are discerning in judgement, think independently and critically, and communicate effectively.

- **Self-directed learners** who take responsibility for their own learning, are curious, reflective, and persevering in the lifelong pursuit of learning, driven by their passion and purpose.

- **Active contributors** who are empathetic and open-minded to collaborate effectively in teams, exercise initiative, have courage to take risks responsibly, are innovative, and strive for excellence.

- **Concerned citizens** who are rooted to Singapore, have a strong civic consciousness, are responsible to their family, community and nation, and take active roles in improving the lives of others.

Future of Learning

A movement to transform what and how our students learn so that they are able to thrive and harness opportunities in our rapidly changing world.
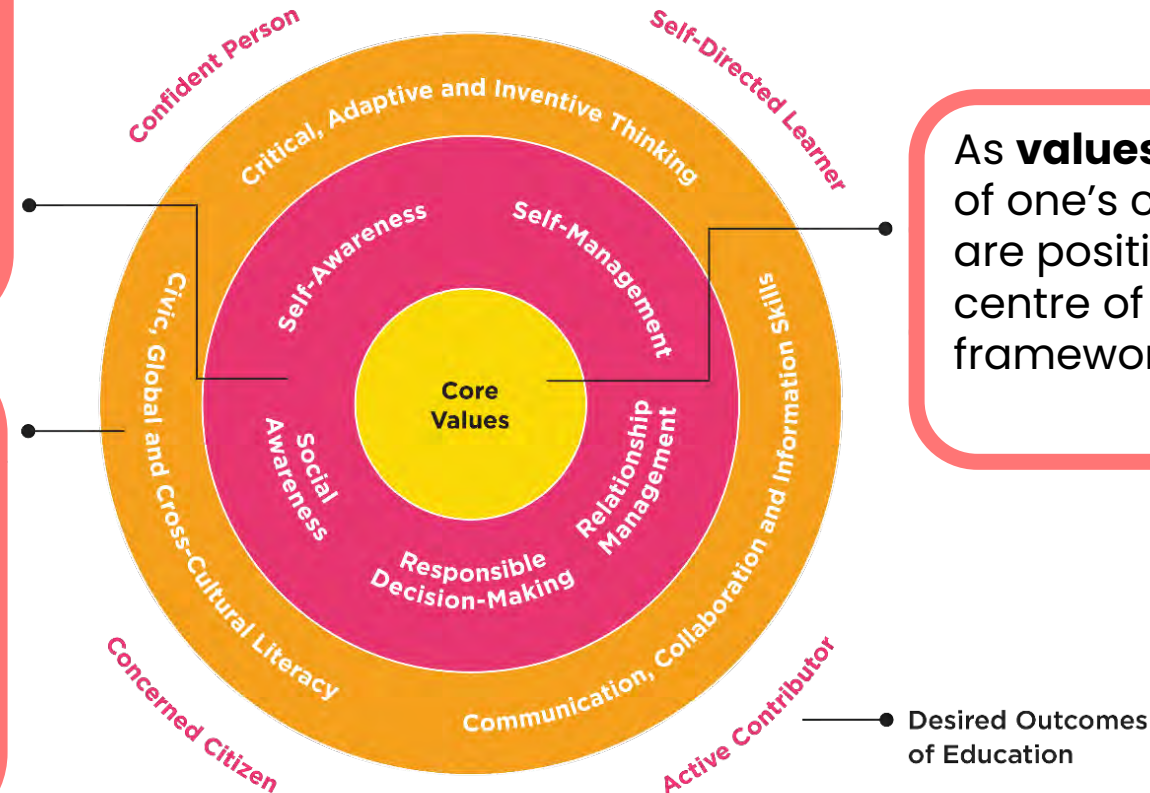
Strengthen 21ˢᵗ Century Competencies

Educational Technology as capability multiplier

Reimagine learning spaces and partnerships to provide rich learning contexts

Intentional and holistic development of 21CC

The inner ring of **Social-Emotional Competencies (SEC)** are necessary for students to enact their values purposefully and demonstrate good character in all contexts of life.

The outer ring of **Emerging 21st Century Competencies (E21CC)** enable students to thrive in and beyond school while living, learning and working in rapidly changing, highly digitalised and interconnected environments.

As **values** form the core of one's character, they are positioned at the centre of the framework.

Confident Person
Self-Directed Learner
Critical, Adaptive and Inventive Thinking
Self-Awareness
Self-Management
Civic, Global and Cross-Cultural Literacy
Core Values
Relationship Management
Social Awareness
Communication, Collaboration and Information Skills
Responsible Decision-Making
Concerned Citizen
Active Contributor

Desired Outcomes of Education
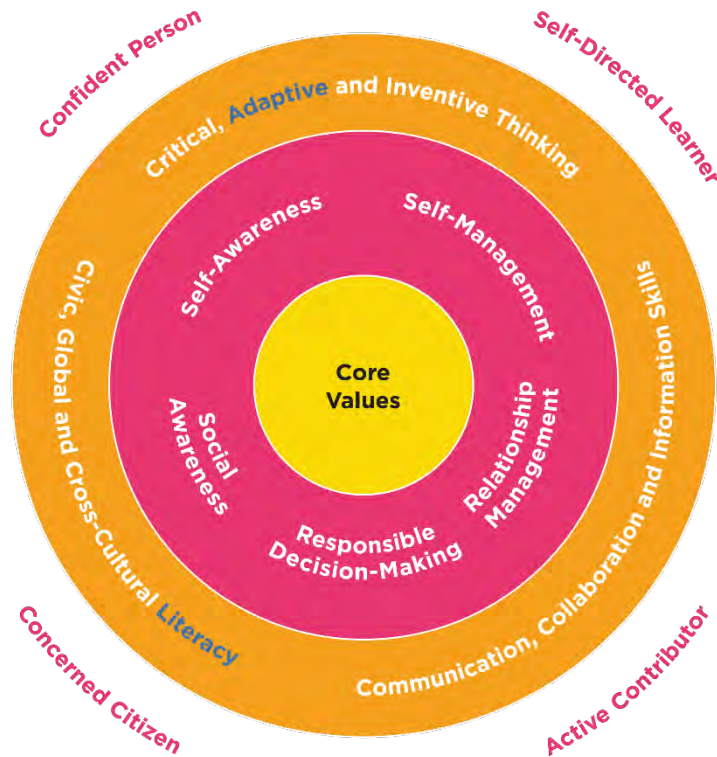
©2023 Ministry of Education, Singapore

The development of values, SEC, and E21CC are (i) **complementary** and **mutually reinforce one another**; and (ii) should be **intentionally designed for and facilitated.**

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To advance 21CC development in our system, our understanding of 21CC development has to evolve with the times

We have enhanced our **Framework for 21CC and Student Outcomes** to renew the understanding of how our students can be prepared for a more uncertain and complex world by:

Foregrounding Adaptive Thinking

- understanding the **variety of contexts, situations** and **environments** one is exposed to

- **managing complexity** and **ambiguity** more confidently

Confident Person

Self-Directed Learner

Critical, Adaptive and Inventive Thinking

Self-Awareness

Self-Management

Civic, Global and Cross-Cultural Literacy

Social Awareness

Core Values

Relationship Management

Responsible Decision-Making

Communication, Collaboration and Information Skills

Concerned Citizen

Active Contributor

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Elevating the emphasis from awareness and skills to Literacy

- the **awareness** and **understanding** of social contexts
- **contributing constructively** to their community and nation, and **interacting respectfully** and **empathetically** with others in **diverse communities**

More information on the enhanced 21CC Framework can be found here.

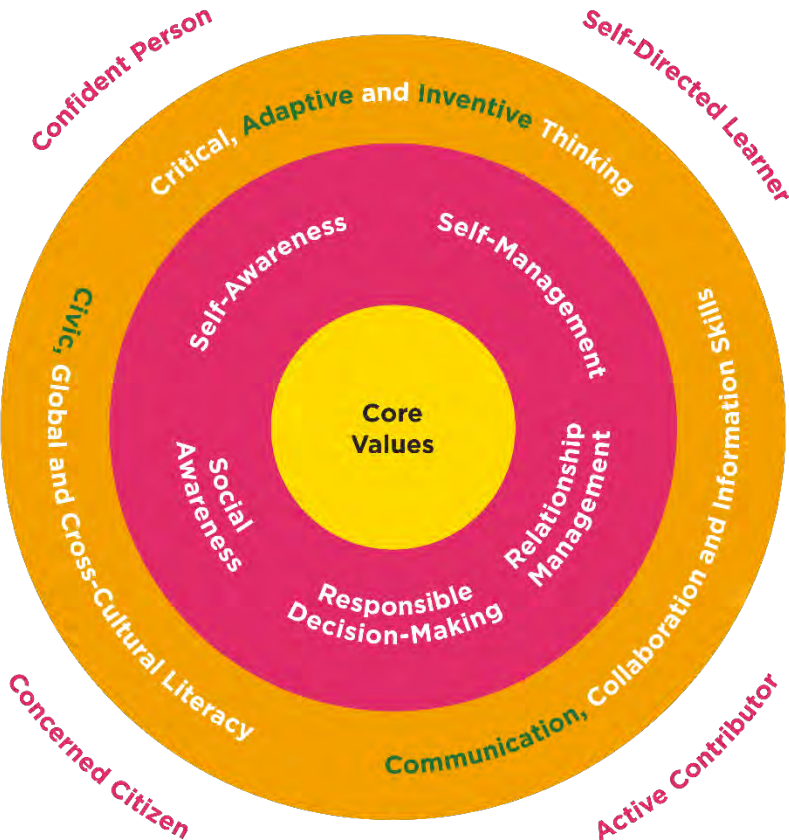# Room for further development of the following E21CC

Adaptive Thinking

i. Assesses different contexts to make connections and draw new insights

ii. Manages complexities and ambiguities

Civic Literacy

i. Demonstrates understanding of values, ideals and issues of significance

ii. Plays active and constructive roles

Inventive Thinking

i. Explores possibilities and generates novel and useful ideas

ii. Evaluates and refines ideas to formulate novel and useful solutions

Communication

i. Effectively communicates information and co-constructs meaning

ii. Engages empathetically with diverse perspectives

Confident Person
Self-Directed Learner
Critical, Adaptive and Inventive Thinking
Civic, Global and Cross-Cultural Literacy
Self-Awareness
Self-Management
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Social Awareness
Relationship Management
Responsible Decision-Making
Communication, Collaboration and Information Skills
Concerned Citizen
Communication, Collaboration and Information Skills
Active Contributor

*Schools have the autonomy to decide on their priority areas based on their school contexts

Within the E21CC priority areas, our students need to be...

Adaptive Thinking

i. **confident** in situations in which they do not have established answers and **resilient** in the face of failure; and

ii. able to respond to changing contexts **nimbly**

Inventive Thinking

i. **curious** and **reflective** about what they learn, while being driven by a sense of purpose; and

ii. cognitively **flexible** in approaching problem-solving

Civic Literacy

i. **willing to act** with shared commitment and ideals when engaging with social and global issues, while remaining grounded in the Singapore context; and

ii. **discerning** enough to critically assess information that they encounter online and evaluate societal issues

Communication

i. **courageous** and spontaneous in voicing new ideas and able to persuade others; and

ii. **open-minded** and **empathetic** so that they can communicate and collaborate across different cultures

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Learner-centred Balanced Assessment
Three Shifts, One Assessment Vision

Shifting assessment mindsets	Strengthening student well-being
• Recognise that assessment is integral to teaching and learning and should not end up disrupting regular T&L • Reduce the over relentless 'chase' of marks and grades • Emphasise the purpose of assessment for feedback on students' strengths and areas for growth, thus supporting their learning (i.e., support learning for life)	• Avoid undue anxiety among students by calibrating the assessment load and stakes

Learner-centred Balanced Assessment
Three Shifts, One Assessment Vision

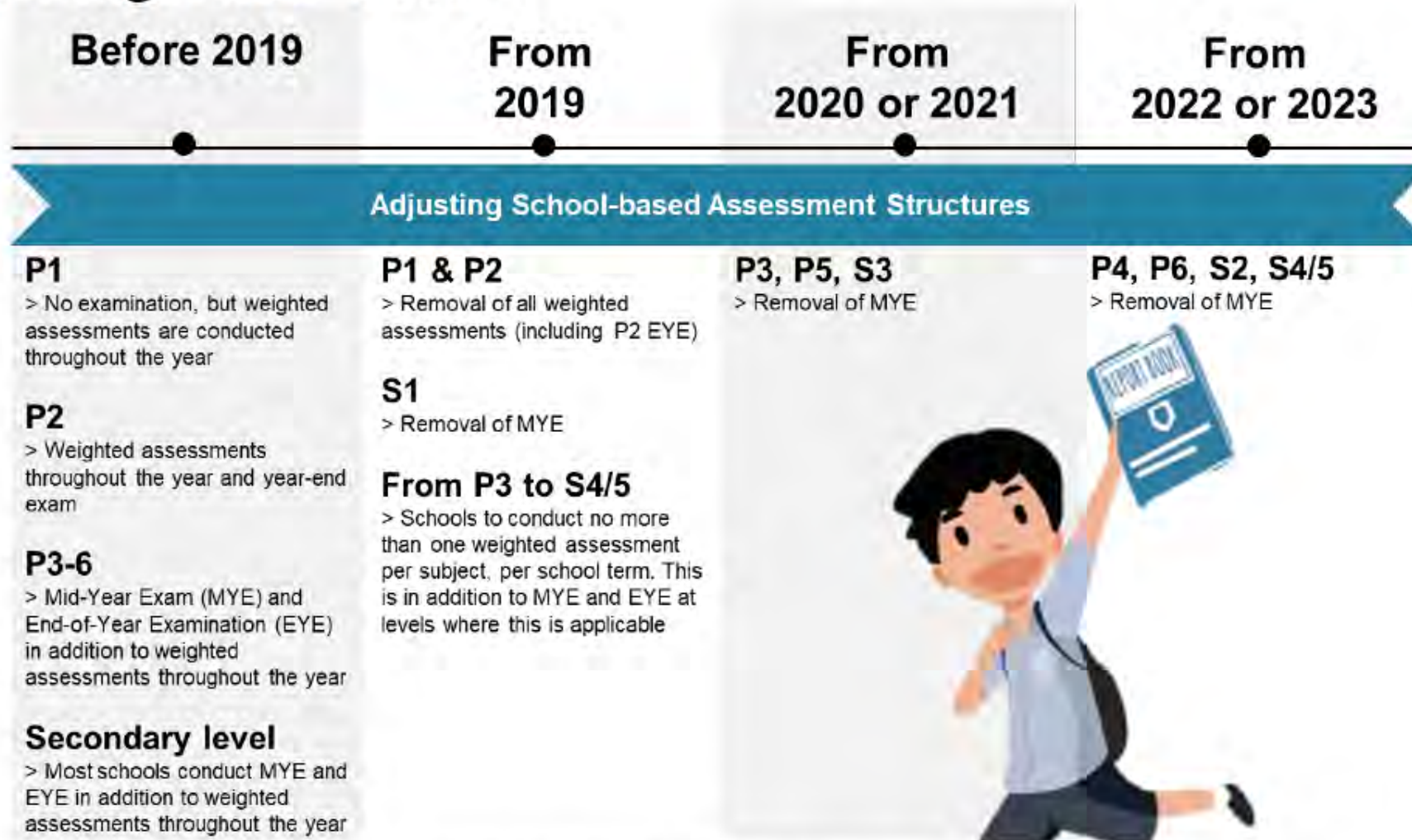| Learner-centred assessment	Balanced assessment
• Assessment is **integral** to the learning process, and • Learners are involved in their own assessment so that they develop as **self-directed learners**	• Assessment practices lie on a continuum • A balanced assessment system consists of both assessment *for* and *of* learning • A balanced assessment system assesses student learning in the **academic** and **student-development** aspects of the curriculum, e.g. 21CC

School-Based Assessment Changes: Through the Years

Before 2019	From 2019	From 2020 or 2021	From 2022 or 2023

Adjusting School-based Assessment Structures

P1
> No examination, but weighted assessments are conducted throughout the year

P2
> Weighted assessments throughout the year and year-end exam

P3-6
> Mid-Year Exam (MYE) and End-of-Year Examination (EYE) in addition to weighted assessments throughout the year

Secondary level
> Most schools conduct MYE and EYE in addition to weighted assessments throughout the year

P1 & P2
> Removal of all weighted assessments (including P2 EYE)

S1
> Removal of MYE

From P3 to S4/5
> Schools to conduct no more than one weighted assessment per subject, per school term. This is in addition to MYE and EYE at levels where this is applicable

P3, P5, S3
> Removal of MYE

P4, P6, S2, S4/5
> Removal of MYE

Image adapted from MOE Singapore Facebook, https://www.facebook.com/moesingapore/posts/10157686745832004

Understanding Full Subject-Based Banding (Full SBB)

What is Full SBB?

WHAT IS FULL SBB?

- Full SBB will be implemented in secondary schools from 2024, and aims for students to:

Have greater ownership of their learning according to their strengths, interests, abilities, talents and learning needs.

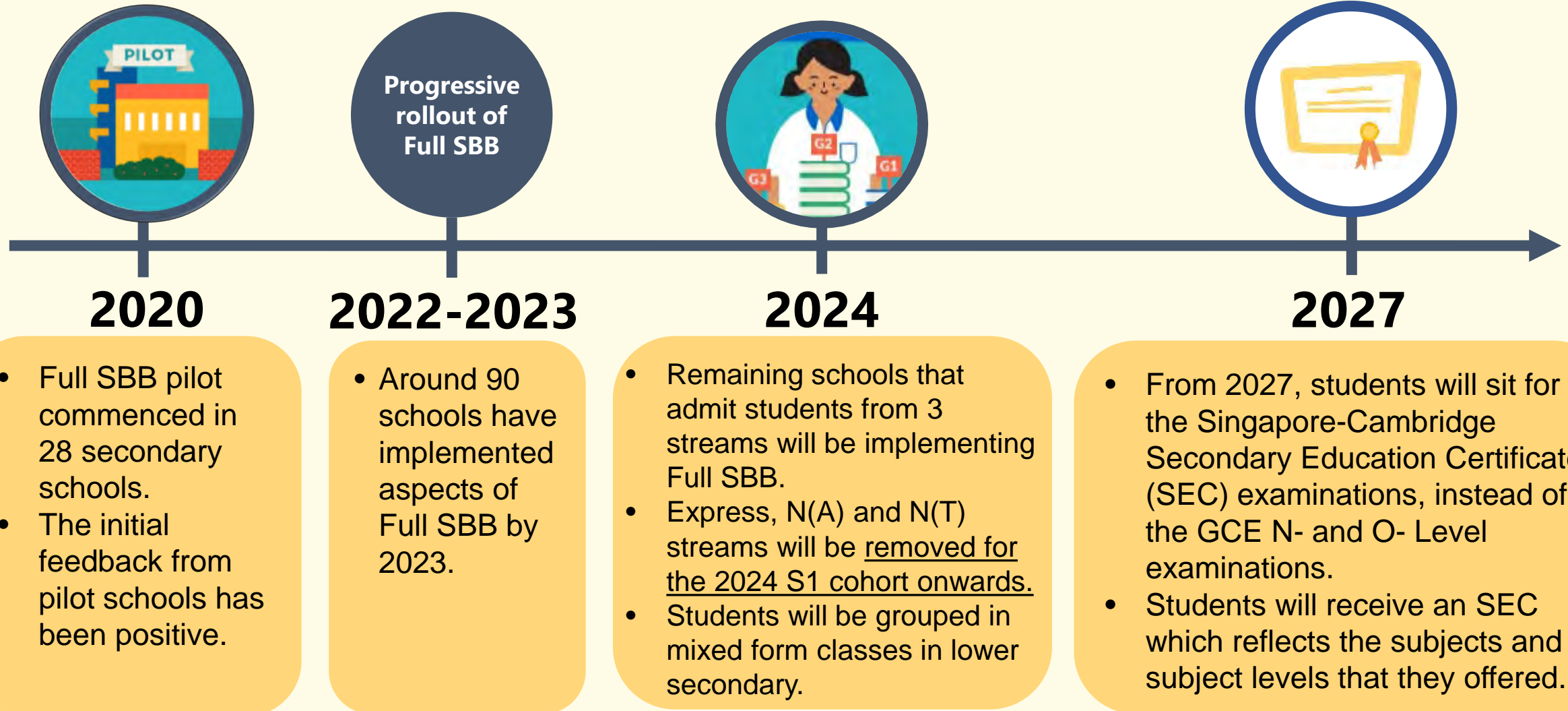Develop a growth mindset and an intrinsic motivation to learn for life.

Have more opportunities to interact with friends of different strengths, interests, abilities and talents.

Have more options for post-sec pathways, while ensuring they have strong fundamentals and can thrive in their chosen pathway.

FULL SUBJECT-BASED BANDING (FULL SBB)

2020
- Full SBB pilot commenced in 28 secondary schools.
- The initial feedback from pilot schools has been positive.

2022-2023
Progressive rollout of Full SBB
- Around 90 schools have implemented aspects of Full SBB by 2023.

2024
- Remaining schools that admit students from 3 streams will be implementing Full SBB.
- Express, N(A) and N(T) streams will be removed for the 2024 S1 cohort onwards.
- Students will be grouped in mixed form classes in lower secondary.

2027
- From 2027, students will sit for the Singapore-Cambridge Secondary Education Certificate (SEC) examinations, instead of the GCE N- and O- Level examinations.
- Students will receive an SEC which reflects the subjects and subject levels that they offered.

FULL SUBJECT-BASED BANDING (FULL SBB)

Secondary school experience under Full SBB

- **Mixed form classes** and **common curriculum subjects at Lower Secondary.**
- **Subjects to be offered at G1, G2 or G3**, mapped from the standards of the N(T), N(A) and Express subject levels respectively.
- **Greater flexibility** to customise students' learning by offering subjects at various subject levels.
- **Shift away from stream-based subject offerings.**

After PSLE	Start of Sec	End of Sec	Post Sec

From 2023: Entry to S1 through 1 of 3 Posting Groups

From 2027: Singapore-Cambridge Secondary Education Certificate (SEC) examination

Updated post-secondary admission criteria

Key Observations

The curriculum now places greater emphasis on higher-order thinking skills and application of skills and knowledge in authentic contexts. This includes school – based and national examinations.

Two key observations:

- **Over-drilling**

- **Templatising of answers**
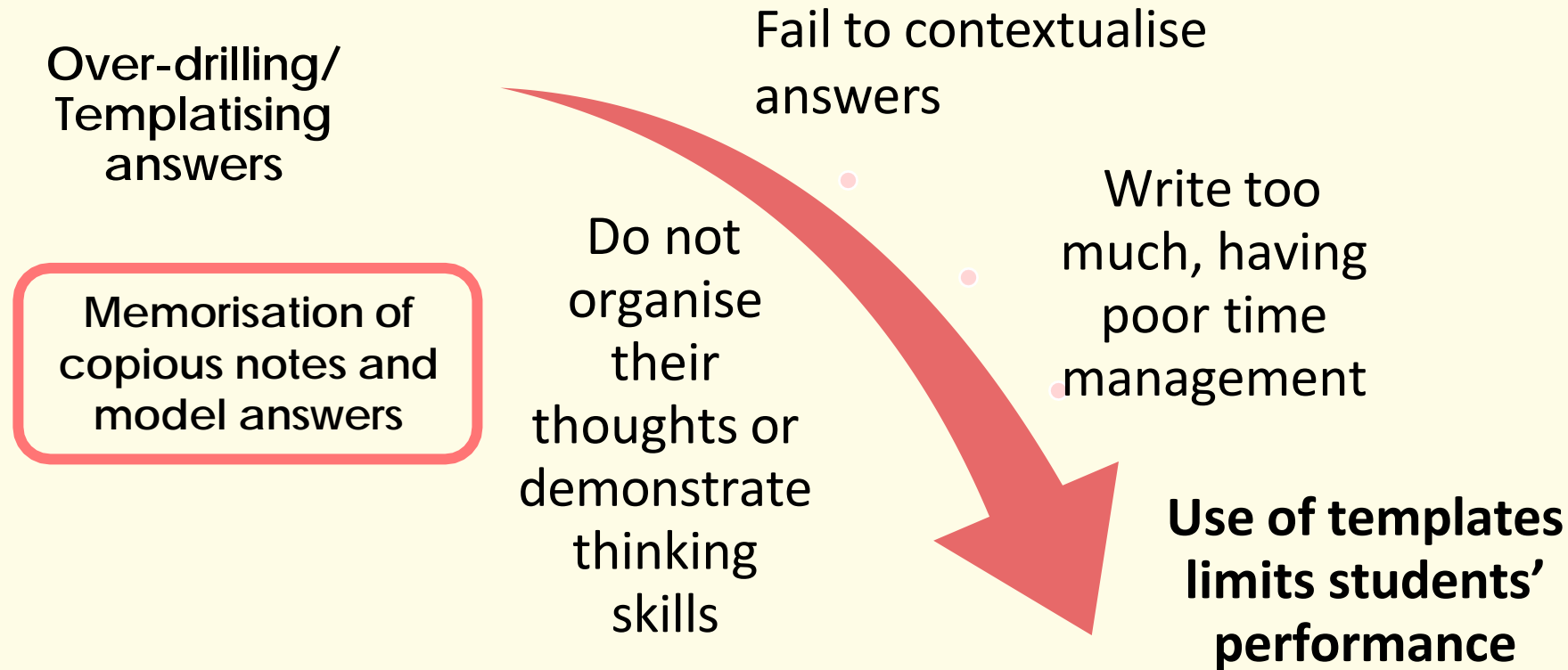
Over-drilling/ Templatising answers

Turning a thinking question into a lower order question

Students are not able to apply and transfer knowledge and skills learnt

Gaps in Learning

"Your students are strong in analysis but may not be strong in presenting their own arguments. As a result, they are not sufficiently engaged in the material or persuasive in their arguments." ~ Cambridge Examiner

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Key Observations

Over-drilling/
Templatising
answers

Fail to contextualise
answers

Write too
much, having
poor time
management

Memorisation of
copious notes and
model answers

Do not
organise
their
thoughts or
demonstrate
thinking
skills

**Use of templates
limits students'
performance**

"Students actually download all they know on the topic. They were writing pages and pages answering the question they have learnt but not the question in front of them." ~ Cambridge Examiner

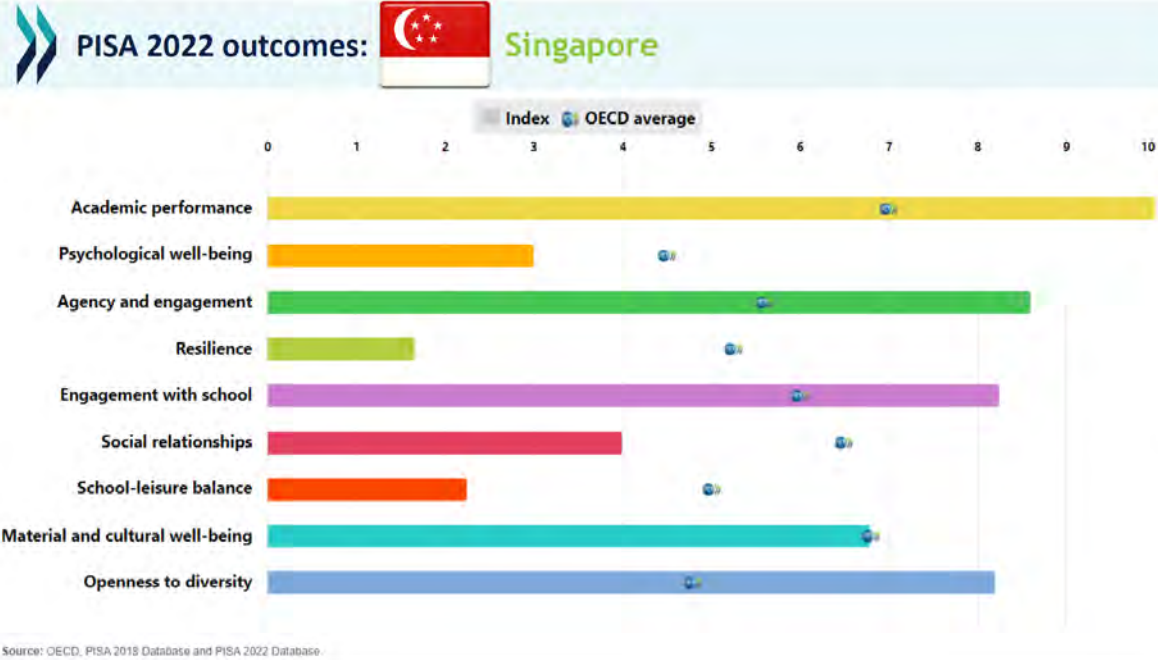Use tests to "motivate" learning

Yields little information about student learning

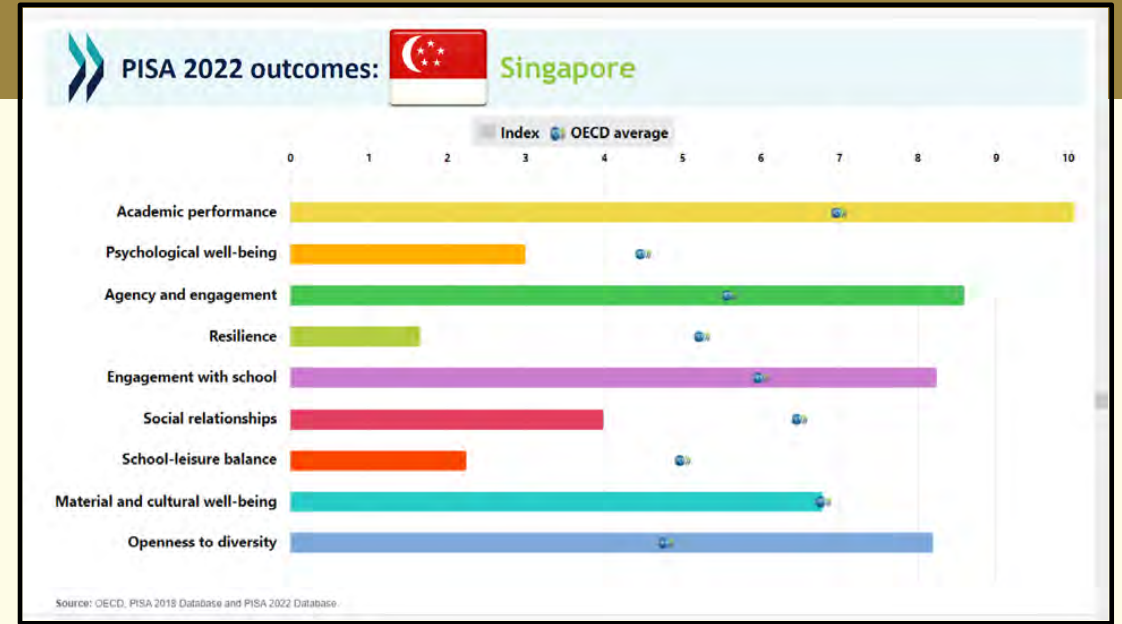Students may get discouraged and develop a dislike for subject or school
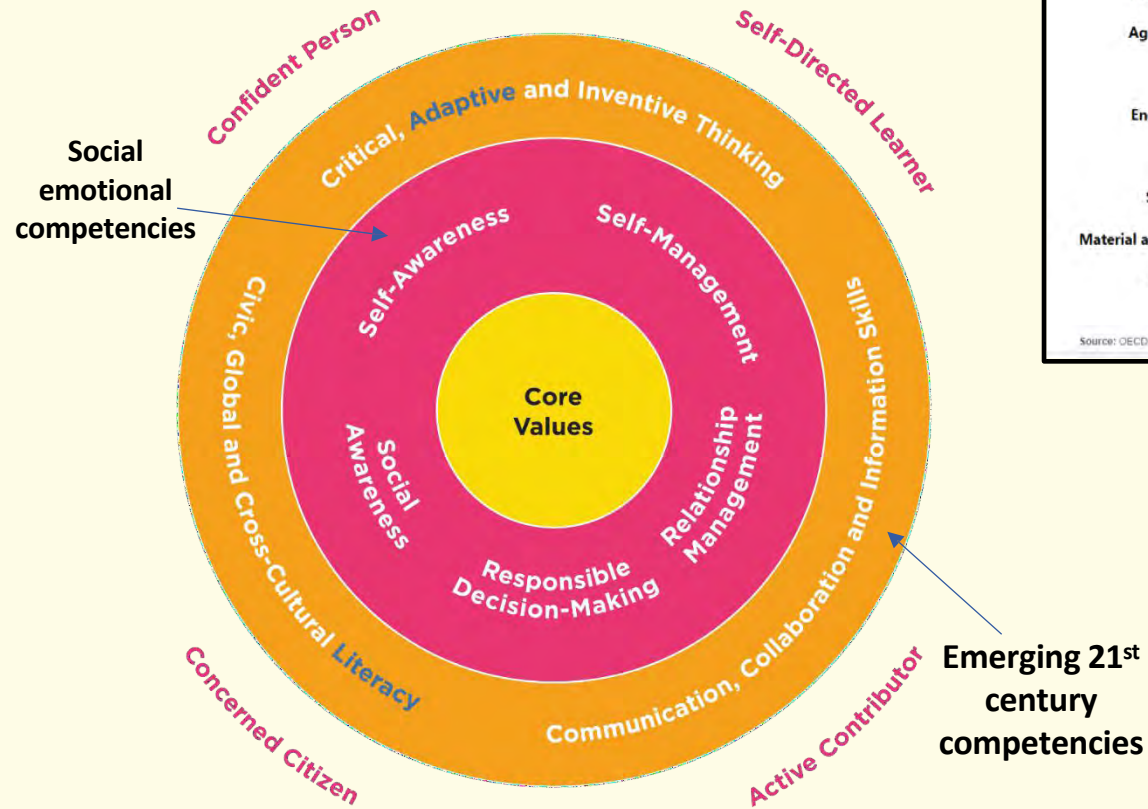
Test anxiety

Affect Self-esteem and Self-confidence

Singaporean students showed high motivation to excel academically:

- **82% wanted to be one of the best students in their class [OECD - 59%]**
- **63% wanted to complete a university degree [OECD - 44%]**

Key Observations

PISA 2022 outcomes: Singapore

Index   OECD average

- Academic performance
- Psychological well-being
- Agency and engagement
- Resilience
- Engagement with school
- Social relationships
- School-leisure balance
- Material and cultural well-being
- Openness to diversity

Source: OECD, PISA 2018 Database and PISA 2022 Database

PISA 2022 outcomes: Denmark

Index   OECD average

- Academic performance
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Source: OECD, PISA 2018 Database and PISA 2022 Database

Key Observations

Social emotional competencies

Emerging 21st century competencies

PISA 2022 outcomes: Singapore

	Index	OECD average
Academic performance		
Psychological well-being		
Agency and engagement		
Resilience		
Engagement with school		
Social relationships		
School-leisure balance		
Material and cultural well-being		
Openness to diversity		

Source: OECD, PISA 2018 Database and PISA 2022 Database.

We need to focus on whole person development.

To strengthen development of social emotional competencies, feedback, self-and peer assessment are key.

Engaging Learners in Assessment:

Strengthening Metacognition

WHY metacognition?

As [our students] progress through our schools, we build on fundamentals by giving our students greater **confidence in themselves and their abilities**, *with more opportunities to explore their interests and cultivate their curiosity, so that they are unafraid to try. And if they fail, they pick themselves up and try again. We cannot shield our children from all uncertainties and imperfections of this world. Nor should it be our aim. But we certainly can and want to equip them with the skills to manage the uncertainties and navigate the imperfections. This means creating* **time and space for our students to develop the life skills they need for success, including the ability to deal with failure**, *like inventive thinking, adaptability, and crosscultural skills...*

Mr Chan Chun Sing, *Minister for Education, Committee of Supply Debate Response*
7 March 2022

https://www.moe.gov.sg/news/speeches/20220307-moefy2022committee ofsupplydebateresponseby-ministerforeducationchanchunsing

How can we develop students to be confident learners by changing certain assessment experience?

How "thinking about thinking" can help children in school and in life

Teaching your child metacognitive techniques can improve their learning and life skills.

A simple example of metacognitive thinking (or reframing) is this:
"taking tests make me anxious." This is a statement, a thought. Turning to metacognition, this train of thought evolves into *"What about taking tests make me anxious...and what can do I to change that?"*

Reference: https://go.gov.sg/allslink

Involving Students in Assessment: Changing Culture and Reviewing Processes

Changing Mindsets (including parents)
Value learning over just performance (Gradual release of responsibilities); ==Growth mindset==

Developing Students' Assessment Literacy
==Forge a culture of learning how to learn (including assessing themselves), understanding and communicating their learning progress==, and the purpose of assessment

Creating Positive Classroom Culture
==Safe to explore and make mistakes==; willing to collaborate and help one another

Enacting Sound Assessment Practices
==Appropriate pitching of assessment==, transferrable skills to other subjects and the future; being adaptable and resilient

Assessment Planning & Designing
==Seamless assessment experience== from lower to upper primary

Students' Assessment Literacy:
Initiating sound learning decisions

Where am I going?

I understand what the subject is about, and I can formulate meaningful learning goals.

Where am I now?

I can learn through self and peer assessment and become better at reviewing my work.

How do I get there?

I understand what to do next to close my learning gaps, and deepen my learning.
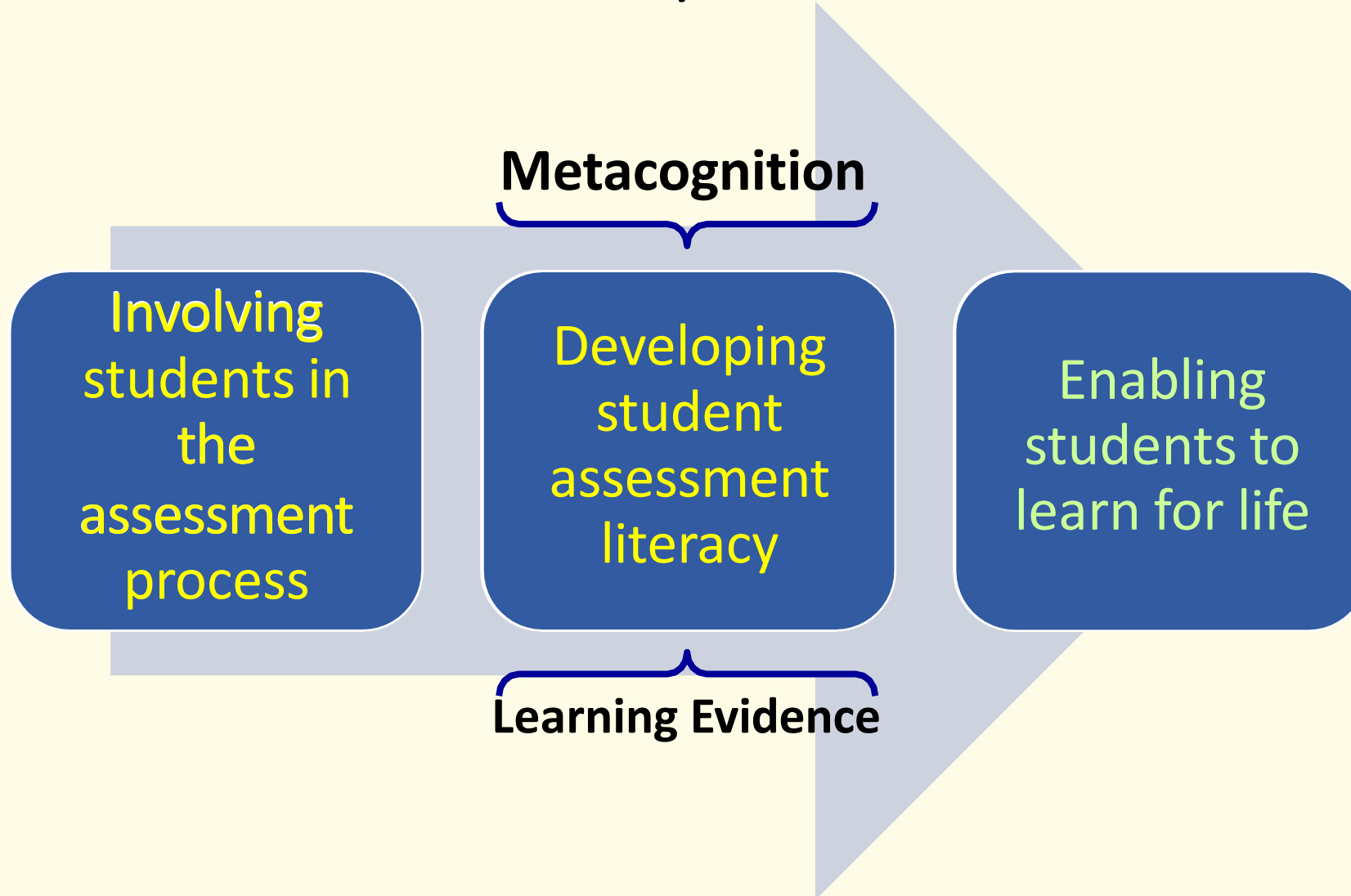
Teachers' Role
Sustaining sound learning

Develop in students an understanding of learning and the nature of the discipline.

Develop in students the competencies for ==*assessing their learning gaps and successes*==, in particular, through self and peer assessment.

Develop in students ==*metacognition and feedback literacy*==.

Future - ready Students

Metacognition

| Involving students in the assessment process | Developing student assessment literacy | Enabling students to learn for life |

Learning Evidence

When more time can be spent on metacognitive activities

- Students given more autonomy to **reflect on and make judgements of their learning progress and achievements, across a series of tasks** (giving them opportunity to change or sharpen their judgements of their learning).

- Students are able to **transfer their learning** across topics or new scenarios, when they ma[ ] use of general metacognitive strategies to help them tackle a problem.

- They are also able to be **more aware of their strengths and weaknesses** and adjust their own cognition and thinking.

When more time can be spent on metacognitive activities and triangulation of learning

More opportunities for students and teachers to discuss students' learning progress through different sources of learning evidence, and for students to plan the next steps after reflecting on their strengths and areas for improvement

Metacognition and Triangulation of Learning Evidence Practices

Involve students in the assessment process through **metacognitive practices across tasks and time** (e.g., model thinking process, making thinking visible through think aloud protocol, peer and self assessment).

Enhance students' metacognition via **sense making different evidence of learning** rather than just rely on 'drill and practice' or test results alone
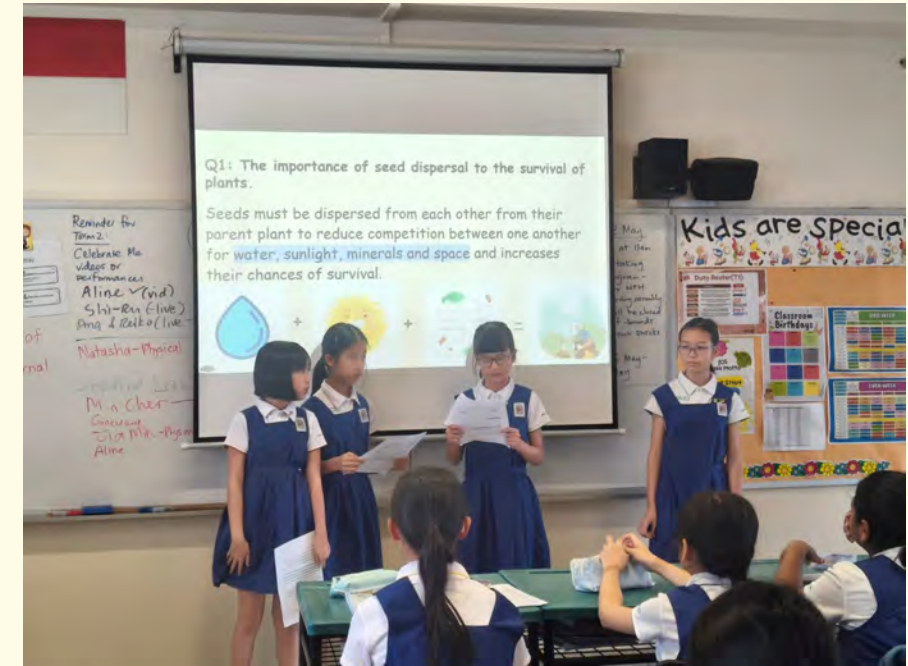
CHIJ KCP
Curriculum

A Curriculum that Empowers and Engages

- **Authentic Learning Experiences that bring about the Joy Of Learning.**

- **Innovative and Engaging teaching strategies that engage learners.**

- **Assessment AS Learning.**
    - Assessment as part of Teaching and Learning in the classroom.
    - A balanced assessment system should have both Assessment of Learning (such as mid – year examinations) as well as Assessment For Learning (classroom assignments and assessments).
    - Assessment should lead to meaningful learning.
    - The continuous use of assessment information guide teachers in improving their teaching so as to address the needs of their students.
    - This can come in the form of formative assessment strategies such as feedback; one to one consultation; exit card; journals; reflections and detailed rubrics.

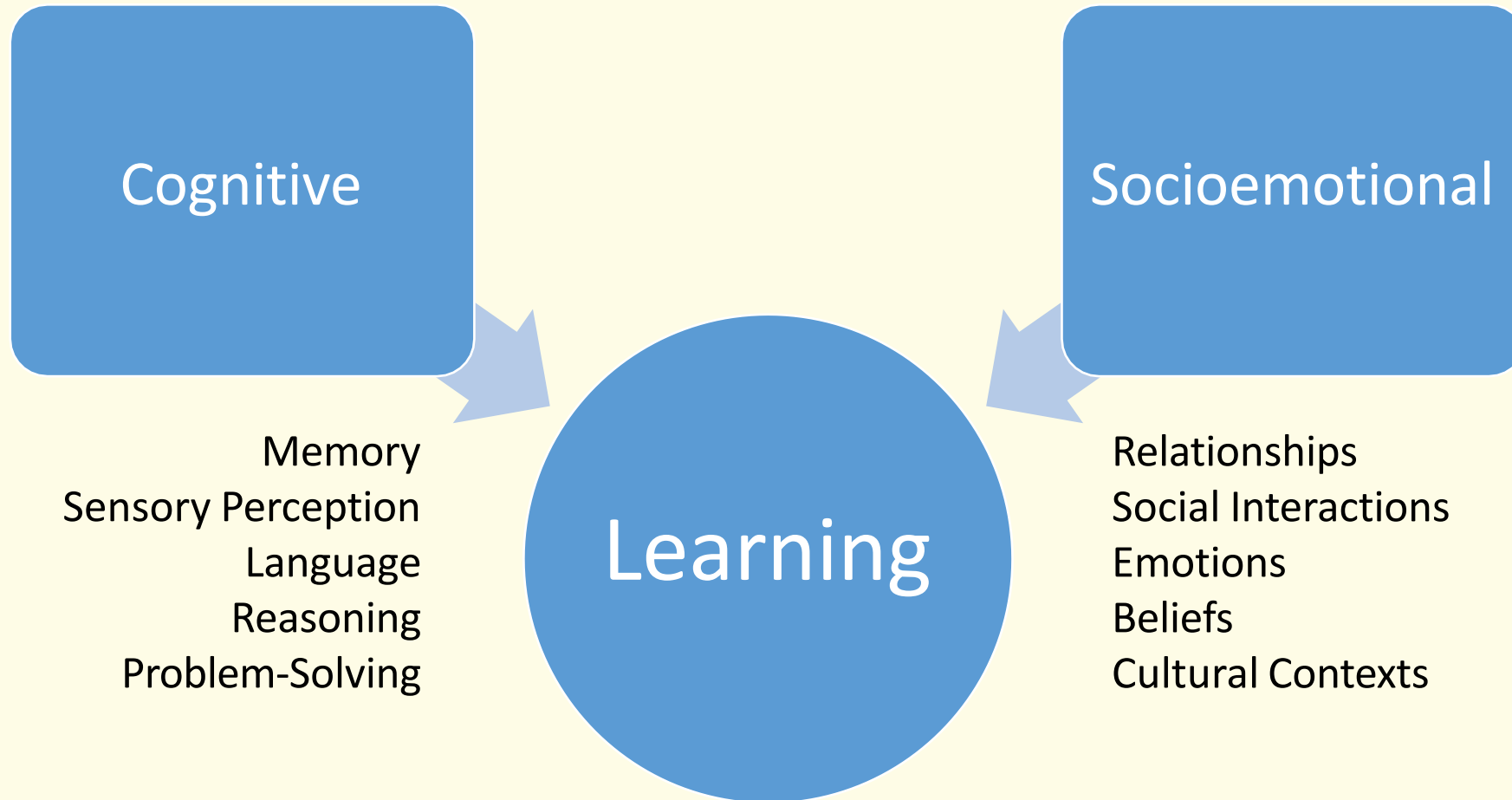# Assessment changes aimed to Empower and Engage our students

- As we reduce the assessment load, the aim is not to erode the pursuit of excellence. We are starting from a high point of rigour.
- Have more time and space to deepen their learning.
- Better enjoy the process of learning and develop dispositions for lifelong learning.
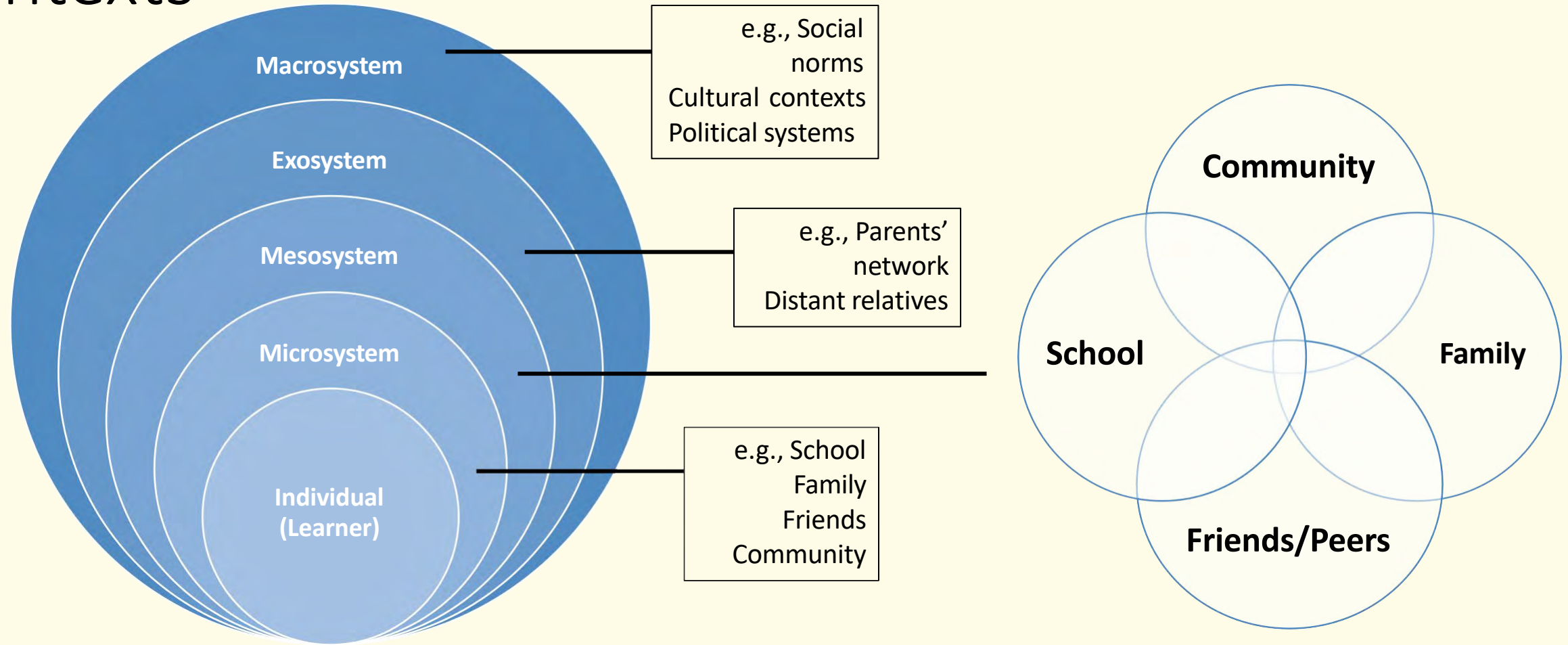
Assessment and Student Well - Being

Learning exists across many social contexts

Macrosystem — e.g., Social norms / Cultural contexts / Political systems

Exosystem

Mesosystem — e.g., Parents' network / Distant relatives

Microsystem

Individual (Learner) — e.g., School / Family / Friends / Community

Community

School

Family

Friends/Peers

Every child wants to and can learn.
Assessment is integral to teaching and learning.
Assessment helps our students become selfdirected learners.

Assessment practices should	Recognise each child's efforts
	Provide opportunities for all students to progress
	Be mindful of the impact on students' wellbeing
	Provide feedback to students
	Develop metacognition to monitor their learning and learn better
Enabling students to	Focus on mastery rather than grades
	Experience greater joy and ownership of learning
	Become motivated to learn deeply, and learn for life

How do we engage with students who have such sentiments?

Fixed mindset

I am always bad in learning...

Indifference about examinations

I won't do well anyway...

Negative self worth

I am always lousier than my friends

'Bochap'
(learned helplessness)

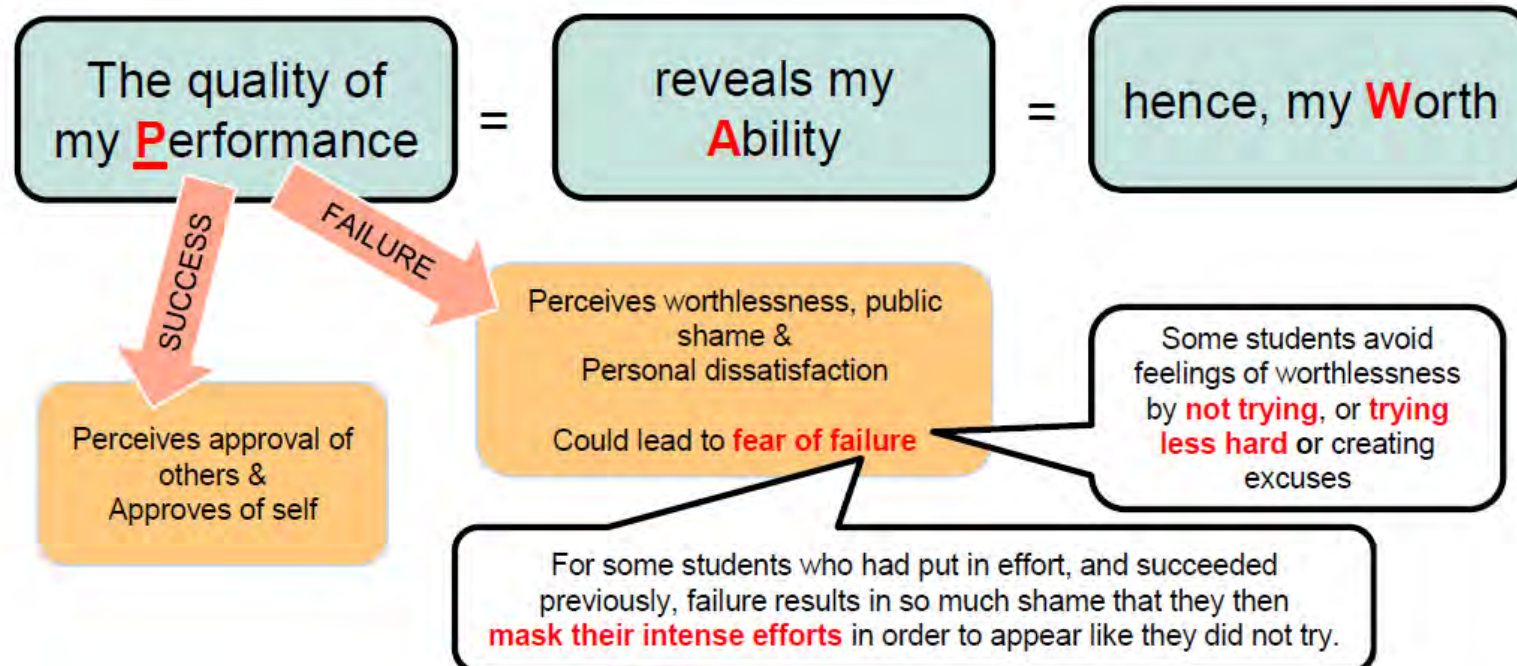Study already still like that...
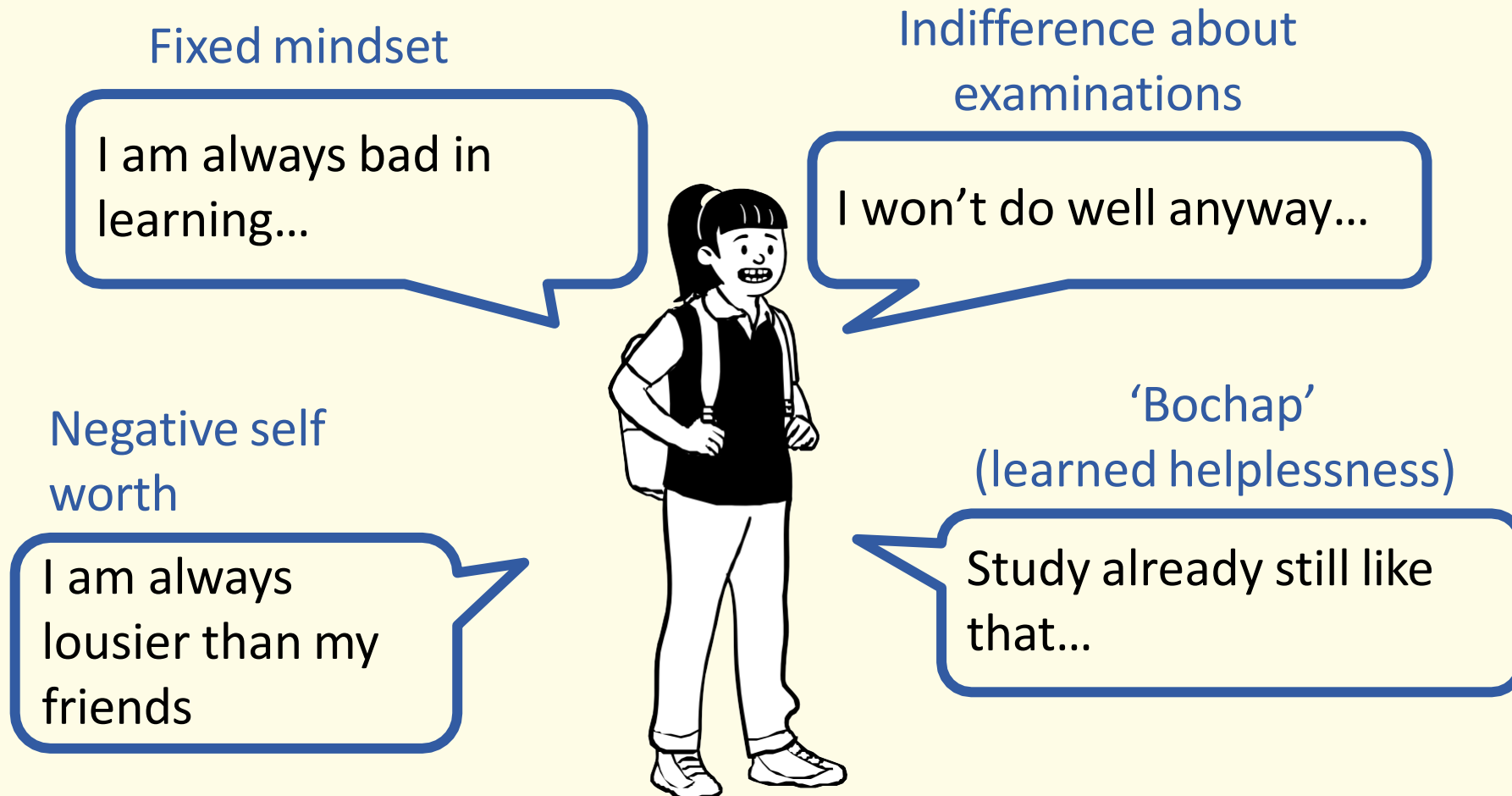
Assessment and Student Well - Being

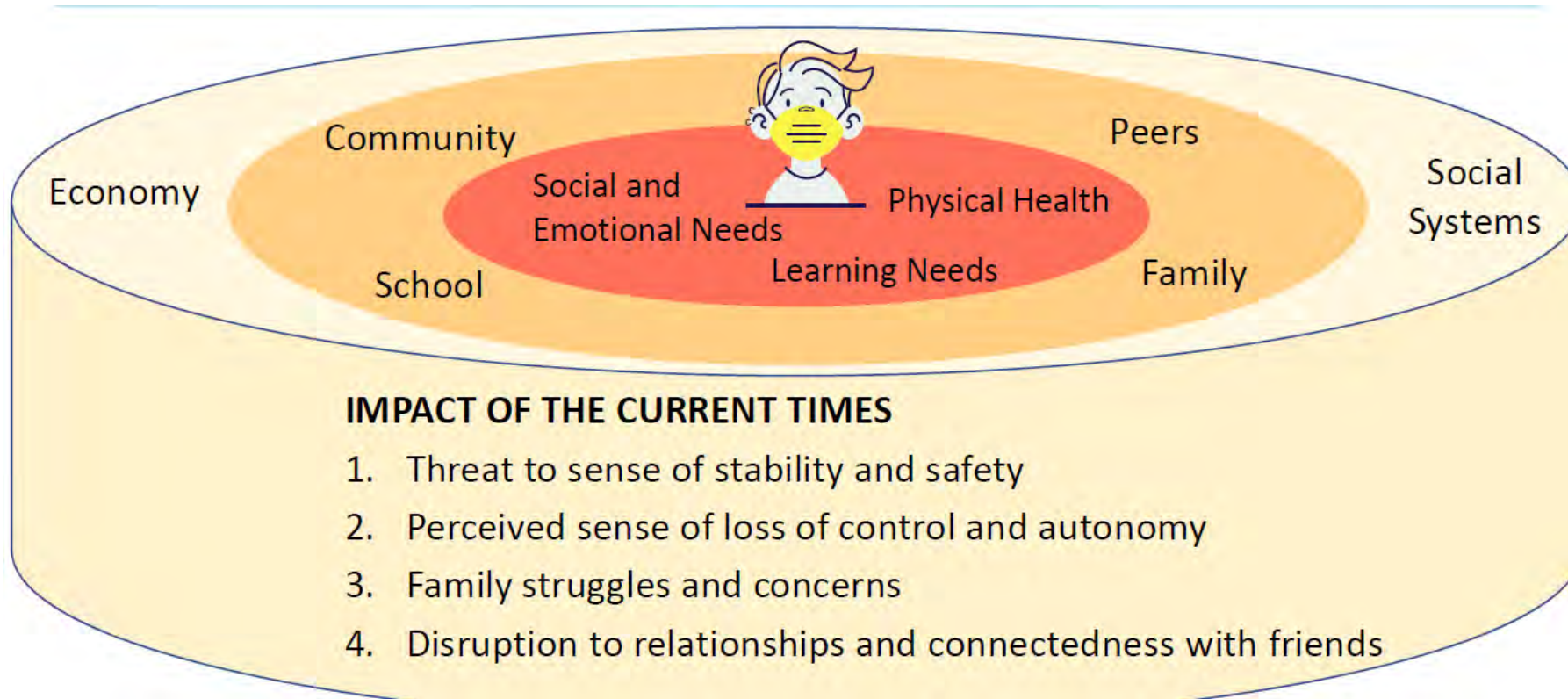Students' motivation and efforts in their studies are related to their sense of self-worth.

Self-Worth Theory
individuals strive to give their lives meaning by seeking the approval of others. Which usually means accomplishing things that are valued by the larger group that one belongs to or hopes to belong to.

The quality of my **P**erformance = reveals my **A**bility = hence, my **W**orth

SUCCESS

FAILURE

Perceives approval of others & Approves of self

Perceives worthlessness, public shame & Personal dissatisfaction

Could lead to **fear of failure**

Some students avoid feelings of worthlessness by **not trying**, or **trying less hard** or creating excuses

For some students who had put in effort, and succeeded previously, failure results in so much shame that they then **mask their intense efforts** in order to appear like they did not try.

Assessment and Student Well - Being

Recognize the unique factors in the child's ecosystem that can negatively impact the learning and well-being of the child.

IMPACT OF THE CURRENT TIMES

1. Threat to sense of stability and safety
2. Perceived sense of loss of control and autonomy
3. Family struggles and concerns
4. Disruption to relationships and connectedness with friends

Assessment and Student Well - Being

Assessment is an inherently social and emotional process

Impact of assessment experiences on students

Students need to **feel competent** to build confidence and self esteem

Students' **motivation and efforts** in their studies are related to their sense of **self-worth**.

Parent's Support

- Support and partnership of parents are crucial in realising these changes.
- These changes provide more time and space to deepen students' learning, help them enjoy the process of learning and develop dispositions for lifelong learning.
- Parents can play a part to encourage Joy of Learning and Learn for Life.

Encourage Joy of Learning!

Encourage Joy of Learning by

- not over-emphasising academic performance

- focus on your child's learning journey, rather than compare them to others

Give our children the time and space to deepen learning

I'M NOT WASTING TIME... Ministry of Education SINGAPORE
...I'M PLANNING MY FIRST NOVEL!
Learning happens in different ways.

I'M NOT DISTRACTED... Ministry of Education SINGAPORE
...I'M LEARNING HOW PLANES FLY!
Learning happens in different ways.

I'M NOT IDLE... Ministry of Education SINGAPORE
...I'M DESIGNING A FUTURE CITY!
Learning happens in different ways.
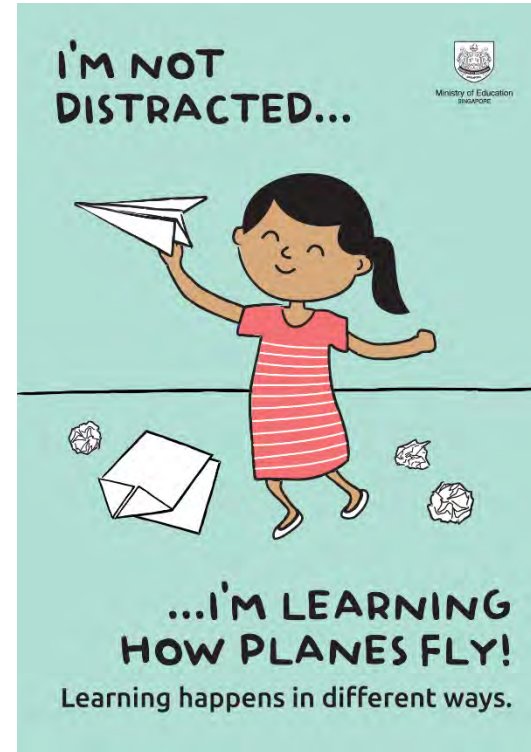
Be the agent to poise in your daughters a lifetime of joy in their endeavours
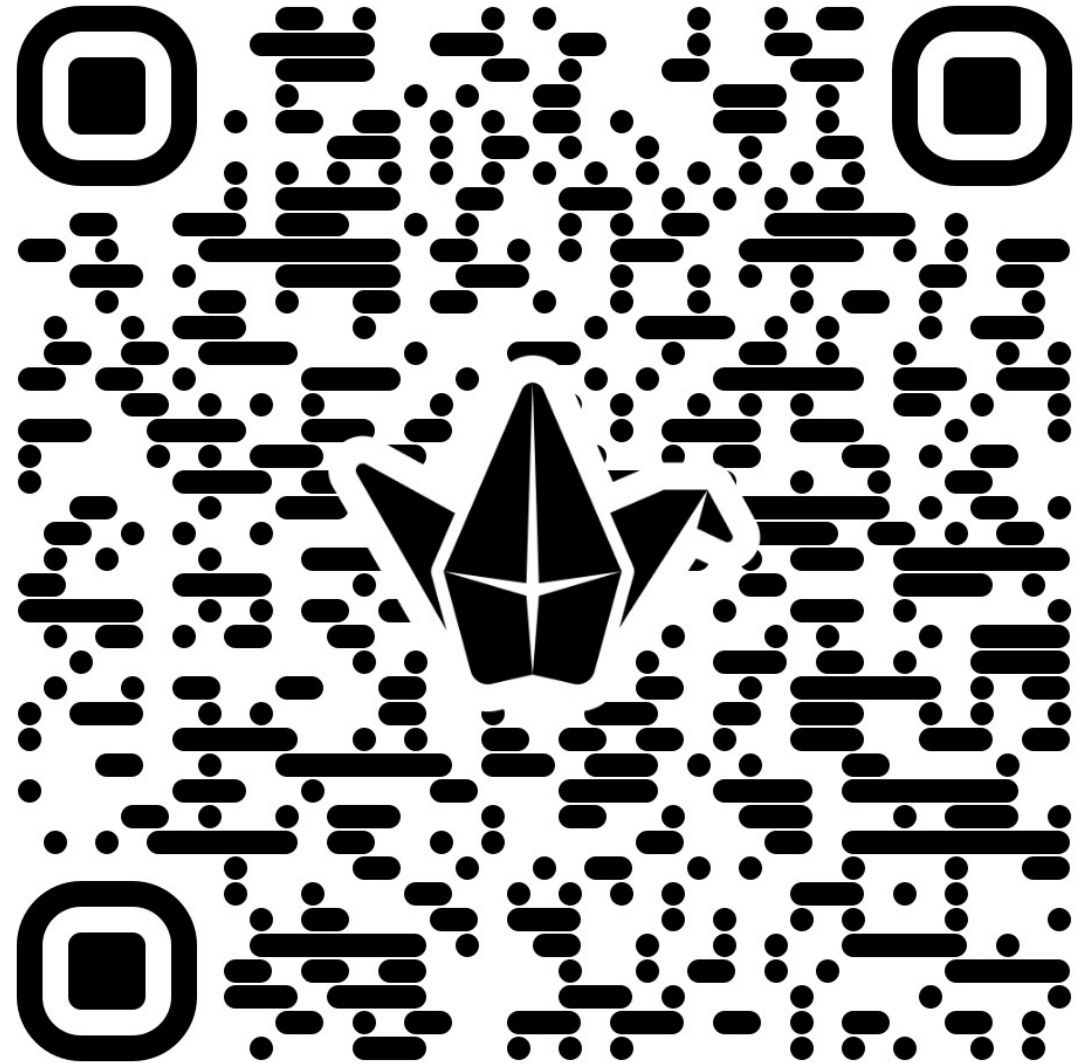
- Imbue in them a strong set of values.
- Demonstrate how to take pride in themselves and their work.
- Cultivate in them a thirst for learning.

What is one small change you can make today to empower your daughter for the future of learning?

Call to Action

What is success in CHIJ (Katong) Primary?