

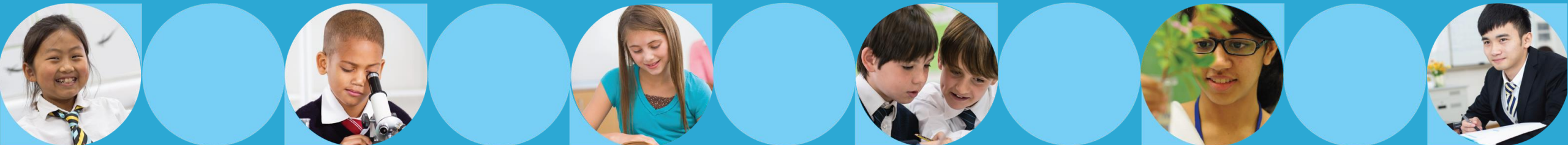


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International Education

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Instructional Practices that Integrate Academic Knowledge with Professional Skills and Social Intelligence

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The Why

The Importance of 21st-Century Skills



Global development

Globalization, technological development, and social diversification are the key processes today. These tendencies require people to obtain 21st-century skills to prosper in a world of constant transformation.



Innovative workplace

To succeed in modern jobs, students should solve problems creatively, learn new technologies, deal with a flood of information, etc. Recruiters highly value those who meet these standards and want to grow, even if they lack academic or working experience.



Rapid technological progress

In the world of cryptocurrency, driverless cars, and blockchain technology, professionals need to know how to use these innovations and adapt to unpredictable circumstances.

Skills Gap Crisis



- ▶ 87% of college graduates believe they are well-prepared for the workforce.
- ▶ 50% of hiring managers think grads are well-prepared for the workforce.

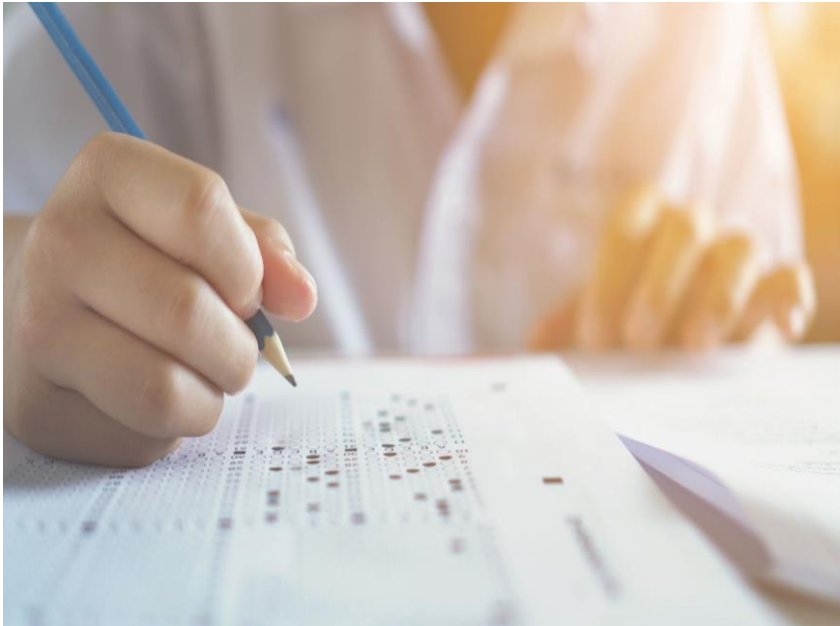
Let's Define....

Academic Knowledge: A student's increasing and meaningful understanding of language, literacy, numeracy, and sciences as foundational to the acquisition of future knowledge.

Professional Skills: Career competencies and abilities used in the workplace (job specific duties which can be trained).

Social Intelligence: The capacity to know oneself and to know others, the ability to read and properly react to social signals, monitor, understand, and manage one's emotions, and fit into a variety of social contexts.

Most Lacking Academic Knowledge/Skills



- ▶ **Writing proficiency-** 44% of hiring managers say recent grads are sorely lacking good writing skills.
- ▶ **Public speaking-** 39% of hiring managers found public speaking skills seriously lacking in candidates.
- ▶ **Data Analysis-** 36% of hiring managers cited this area as a need. Companies need skilled employees, who can organize and analyze data to give them meaningful insight on their sales, clients, finances, and virtually anything else that can be measured.

A blurred background image of a business meeting. Several people in professional attire are gathered around a table, looking at documents and devices. The image is partially obscured by a white and blue geometric overlay on the right side of the slide.

Most lacking soft skills/social intelligence

- ▶ **Critical thinking/problem solving-** 60% of hiring managers say grads lack this skill.
- ▶ **Attention to detail-** 56% of hiring managers say grads lack this skill.
- ▶ **Communication-** 46% of hiring managers identified this as a gap.



Most lacking soft skills/social intelligence

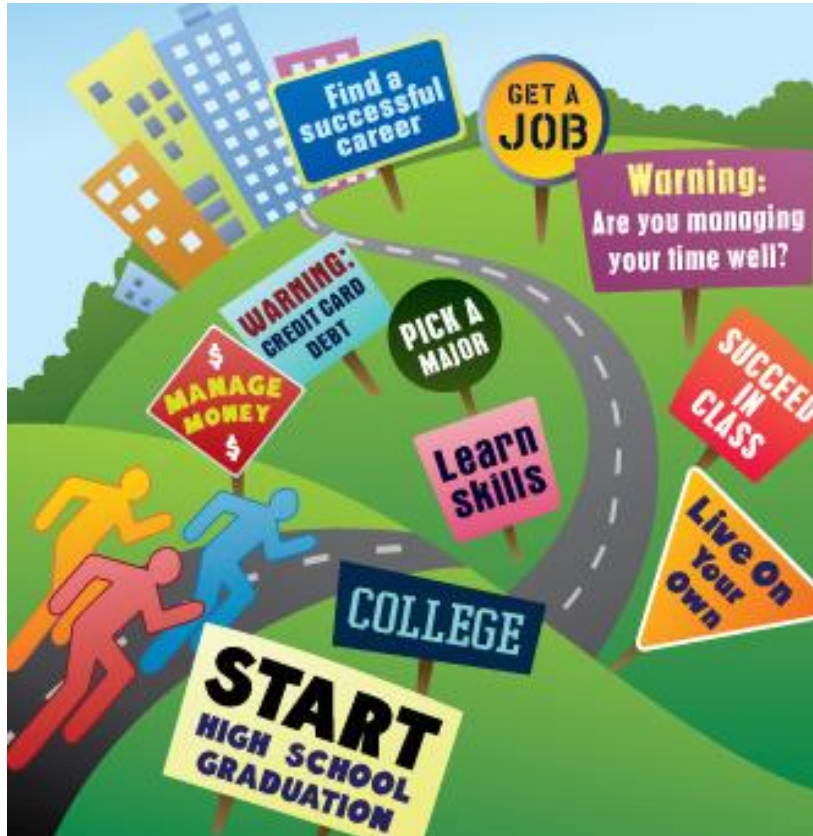
- ▶ **Leadership-** 44% of employers reported this skill was lacking.
- ▶ **Teamwork-** 36% of employers said employees lacked the skills to be able to work with others and be a productive member of a team.

A top-down view of a dark desk with various items: a white smartphone, a pencil, a white notebook with black-rimmed glasses on top, a white keyboard, and a white coffee cup on a saucer.

Most lacking professional skills

- ▶ **Information literacy-** The ability to work with statistics and data and sift through the plethora of information online to find what you are looking for.
- ▶ **Media literacy-** being able to differentiate between reliable and unreliable (fake news) sources is a must.
- ▶ **Technology literacy-** Technology literacy is a hard skill connected with computers, cloud computing, and mobile devices.

To Reach Our Destination... We Need a Roadmap



At your tables, discuss...

Thinking about your students, your country, your community...what are the knowledge, skills, and mindsets students need to be successful in college, career, and life?

In your school...

Are you as a teacher...leader...currently teaching these skills? What is missing or could be emphasized more?



- ▶ Social intelligence is one of the main tools to have effective communication and a productive work environment.
- ▶ It may also be the last bastion of defense to keep jobs in human hands in the age of automation.

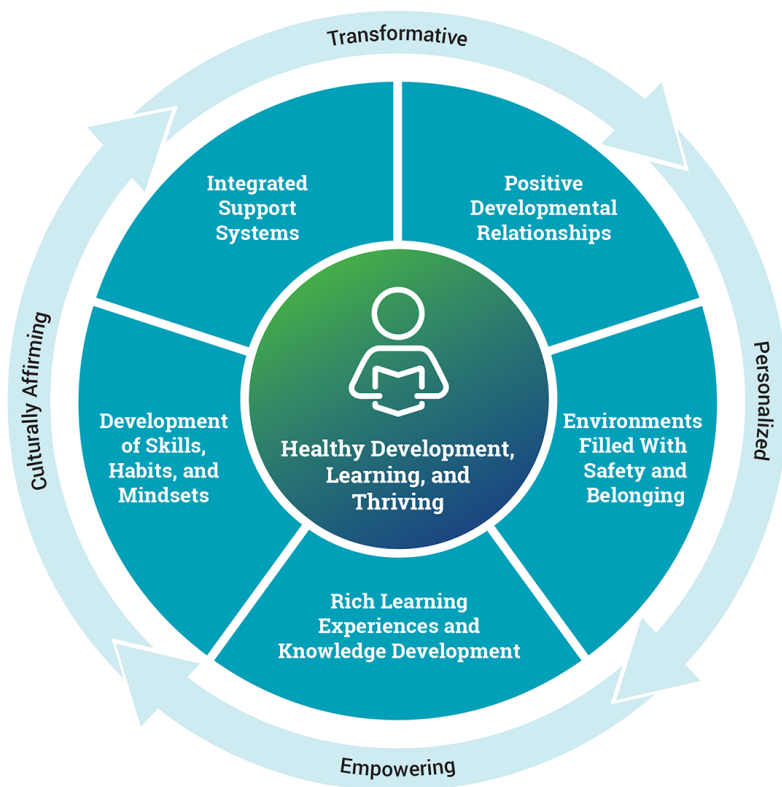


- ▶ Emotions can either enhance or hinder your ability to learn.
- ▶ Educators consistently see the ways in which students' affective development shows up in their learning environments—
 - ▶ when a student gets overjoyed for solving a math problem that challenged them or was able to use a mistake to propel learning;
 - ▶ when students dig into conversations with each other on the influence of media on their lives;
 - ▶ when students identify solutions to pressing community problems;
 - ▶ when students lend another student a helping hand when they are down.

- ▶ School is an emotional caldron: a constant stream of academic and social challenges that can generate feelings ranging from loneliness to euphoria.
- ▶ Have you ever asked a child to “calm down?”
 - ▶ How exactly do you calm down when you’re feeling anxious?
 - ▶ Where do you learn the skills to manage those feelings?”



Guiding Principles for Equitable Whole Child Design



Importance of a Systemic Approach

- ▶ Schools that take a systemic approach to integrating academic knowledge with professional skills and social intelligence support students and adults in cultivating the Cambridge attributes.
- ▶ A systemic approach deepens understanding of multiple spaces and contexts in which students learn and develop, recognizing that the whole school community—inclusive of all adults, families, and community members—is needed to promote the continued growth and development of all students.

Whole Child Design Guiding Principles

Learning environments should support “positive developmental relationships.”

These relationships help to cultivate “environments filled with safety and belonging.”

Such environments are necessary for students to be able to engage in “rich learning experiences.”

Learning experiences integrate the development of “skills, habits, and mindsets.”

And “integrated support systems” should be used to ensure that all students are given the opportunities and supports that they need to thrive.

Environments Filled With Safety & Belonging

- ▶ Environments and life experiences help shape our brains.
- ▶ The environment of a school sets the tone through features of the physical environment, as well as how time and space are used and how relationships and experiences are created.
- ▶ Children's ability to learn and take risks is enhanced when they feel emotionally and psychologically safe; it is undermined when they feel threatened.



Positive Developmental Relationships

- ▶ Positive relationships enable children and adolescents to manage stress, ignite their brains, and fuel the connections that support the development of the complex skills and competencies necessary for learning success and engagement.
- ▶ Such relationships also simultaneously promote well-being, positive identity development, and students' belief in their own abilities.
- ▶ Having secure relationships at school does not just mean that children are treated kindly by adults.
- ▶ It also means that students are nurtured through those relationships to develop independence, competency, and agency—that they grow to become confident and self-directed learners and people.



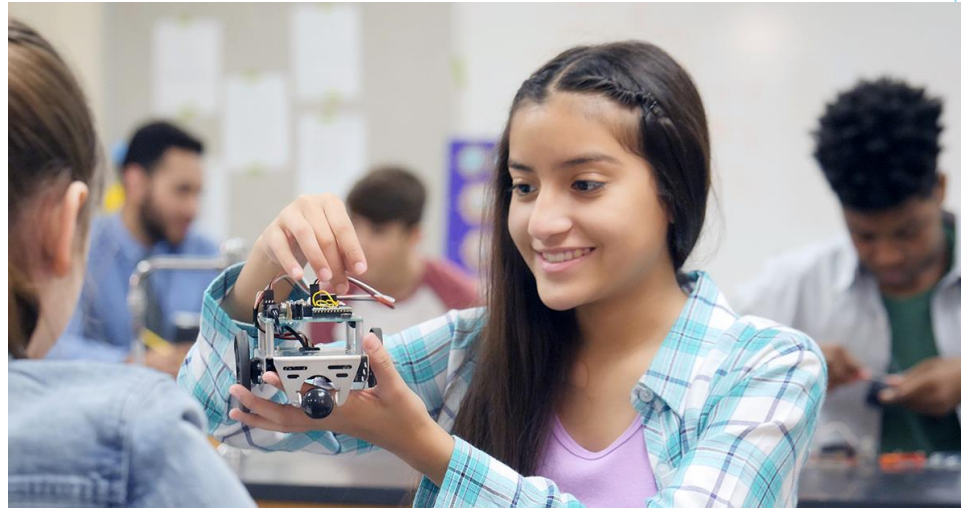


Let's Share....

- What are the structures and practices in place at your school and/or in your classroom that enable the development of continuous, secure, positive relationships?

Rich Learning Experiences & Knowledge Development

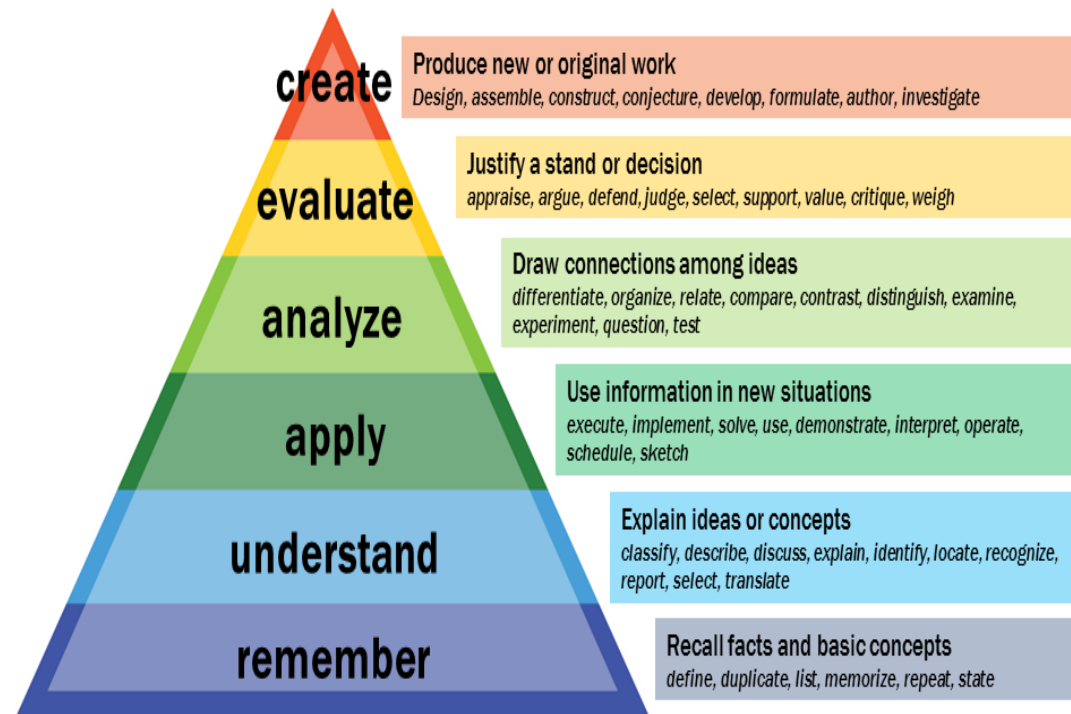
- ▶ Intentional pedagogical approaches, curricular designs, and assessment practices that enable students to deeply understand disciplinary content and develop skills that will allow them to solve complex problems; communicate effectively; and, ultimately, manage their own learning.
- ▶ We must skillfully blend inquiry-based learning with strategic elements of direct instruction using multiple modalities of learning that help students draw connections between what they know and what they are trying to learn.
- ▶ Activities must be well-scaffolded and meaningful in a way that students can relate the content to their lives and the world around them.



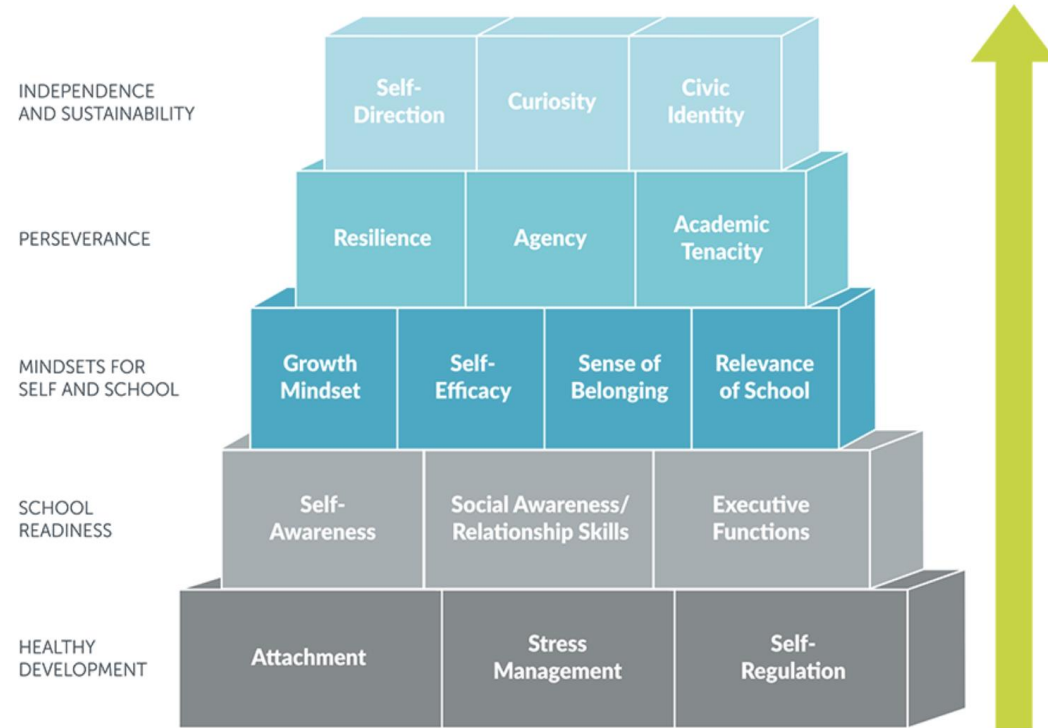
Strategies

- ▶ curriculum and program offerings that support inquiry and problem-based learning around rich, relevant tasks that are culturally connected and collaboratively pursued;
- ▶ performance assessments and rubrics focused on higher-order thinking skills and applications of knowledge that structure the teaching, tasks, feedback, and metacognitive reflections that guide learning; and
- ▶ tools for learning about students' experiences, interests, strengths, and readiness that can be built upon to draw connections to the curriculum and foster learning (e.g., learning surveys, student reflections, observation protocols, formative assessments, and exit tickets).

Bloom's Taxonomy



Building Blocks for Learning



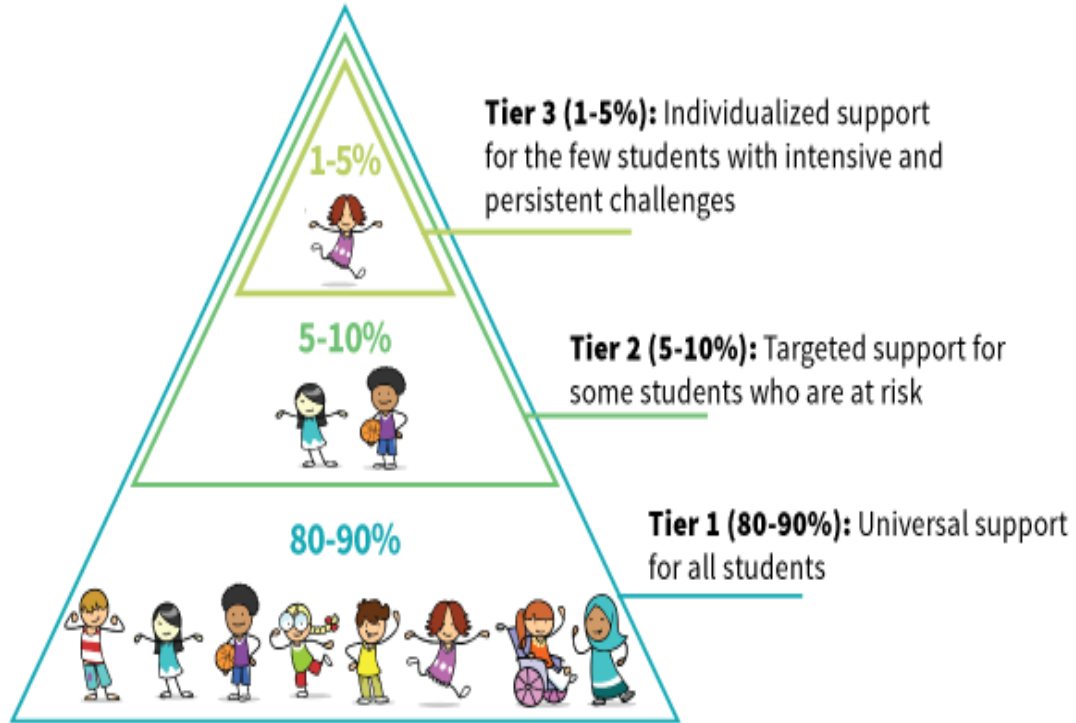
Development of Skills, Habits, and Mindsets

Best Practice Strategies

- Structures that integrate cognitive, social, and affective development into learning include:
 - opportunities and routines that reinforce skills, habits, and mindsets during everyday instruction and school activities.
 - scaffolds that support executive functions like planning, organizing, implementing, and reflecting on tasks.
 - collaboration protocols and rubrics that support interpersonal skill development in the context of subject matter classes.
 - strategies that help students describe their thinking and feelings; build self-awareness; and develop strategies for calming, self-management, and problem-solving.



Integrated Support Systems



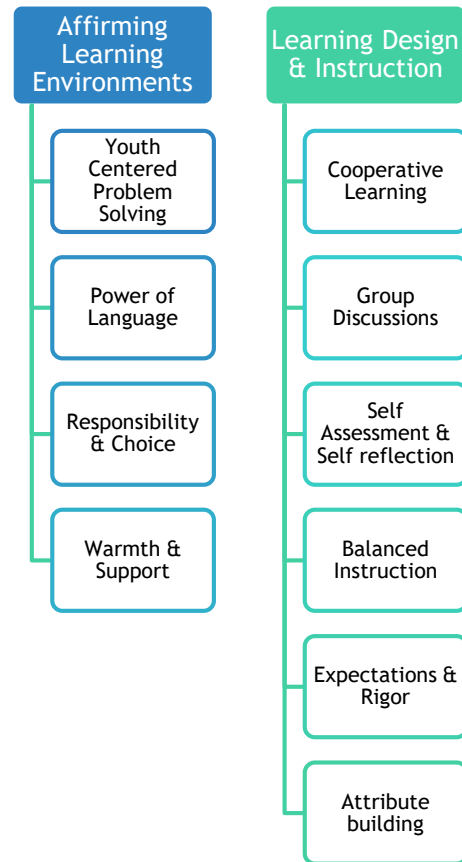
- ▶ Orchestrating integrated supports that systematically assess students' comprehensive needs and strengths and coordinate resources in a unified and collaborative way.
- ▶ Such a system can mitigate barriers, enhance coping, strengthen resilience, re-engage disconnected students and families, and help reduce the opportunity gaps.

Best Practice Strategies

- Structures that incorporate universal and tiered supports include:
 - assessments that help educators understand student wellness and progress and the supports students need;
 - availability of high-quality tutoring and mentoring, counseling, and student support teams;
 - additional before, during, and after-school time for expanded learning, along with summer programs or Acceleration Academies during intersessions; and
 - health, mental health, and community partnerships to support students and families.
 - strategies and practices that ensure collaboration, coordination, and shared developmental approaches across providers of services; and
 - approaches that are culturally competent, carefully integrated, and age appropriate, considering students holistically and with an assets-based lens.



Deeper Dive: 10 Educator Classroom Best Practices



Youth Centered Problem Solving

- ▶ Youth-centered problem-solving practices refers to educators implementing mechanisms which nurture student agency and ownership.
- ▶ Allows students to manage or direct their actions and feel as though they have a say in what occurs.
- ▶ Embrace co-creation of ways of interacting in the classroom.
- ▶ Provide opportunities for students to correct their mistakes and manage themselves and incorporate self-reflection.

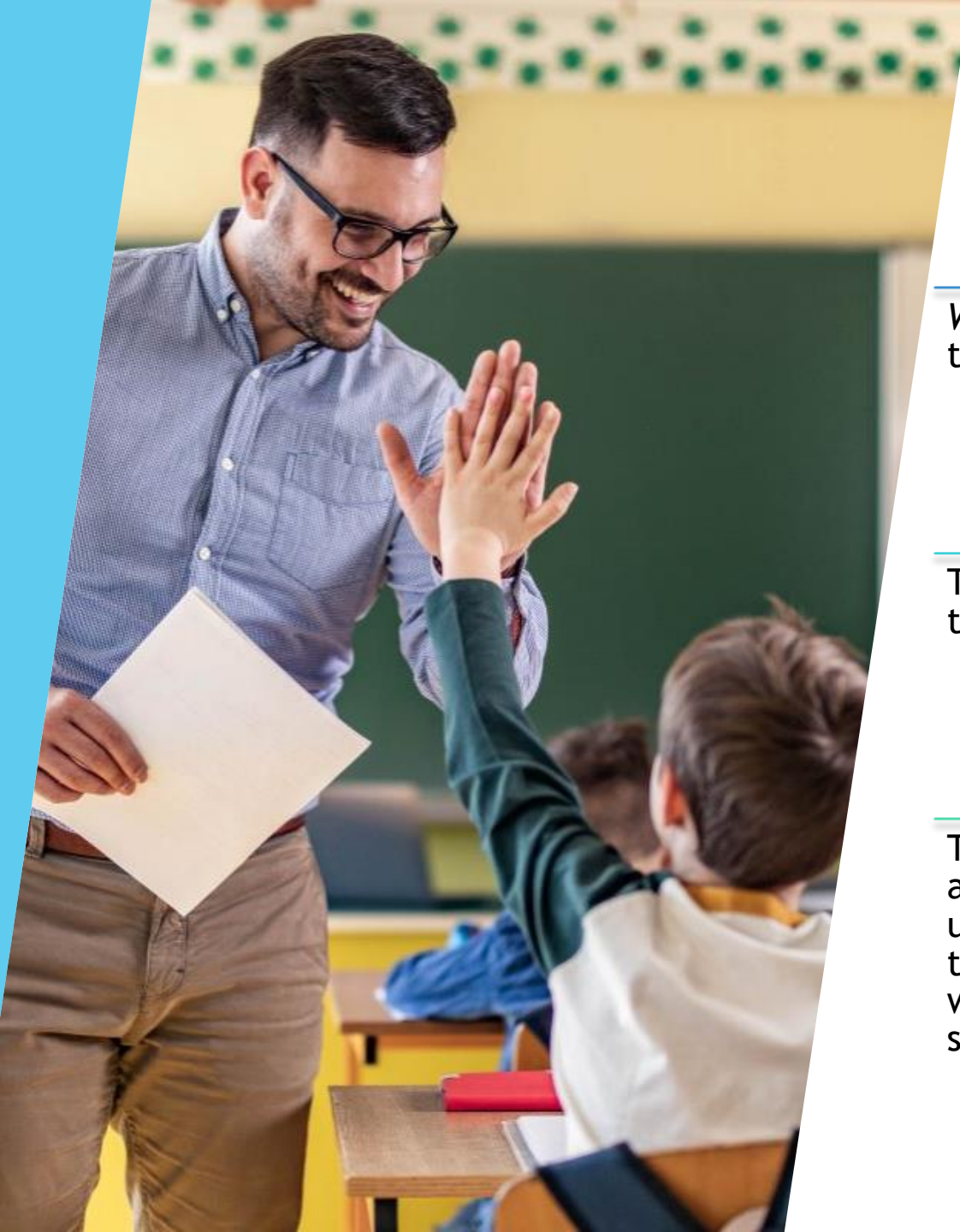
- ▶ How can power-sharing with students cultivate identity, agency, and belonging?
- ▶ What does it look like or could it look like in your classroom?



Power of Language

- ▶ Power of language refers to how educators talk with students.
- ▶ Teacher communication patterns signal their beliefs about students, how warm and secure the teacher is, and how emotionally and intellectually safe the student can be with the teacher.
- ▶ Effective power of language promotes student identity and ensures that students feel like they belong in their learning environment.
- ▶ Effective power of language encourages student effort and reinforces positive student behaviors, helping students to direct their own learning.
- ▶ When educators ask the reflective questions and reinforce specific interactions, they discover where students are coming from, help students connect academics through social skills, and build vocabulary for students to identify and express emotions and thoughts.

WORDS • SO INNOCENT
AND POWERLESS
AS THEY ARE, AS STANDING IN
A DICTIONARY, HOW POTENT
FOR **GOOD** AND **EVIL**
THEY BECOME IN THE HANDS OF
ONE WHO KNOWS HOW TO
COMBINE THEM. NATHANIEL
HAWTHORNE




Warmth & Support


Warmth and support refers to the academic and social support that students receive from their teacher and from their peers.


The teacher creates a classroom where the students know that teachers care about them.


Teachers can demonstrate that they care about their students by asking students questions (academic and non-academic), following up with students when they have a problem or concern, providing the teacher's own anecdotes or stories, and acting in ways in which students know that taking risks and asking questions are safe in the classroom.


Responsibility & Choice

1  Allow students ownership over class routines. Sometimes, students may come up with a better workflow for the classroom!

2  Class meetings can improve communication among students & allow for modeling, sharing, problem solving, & celebrating!

3  Choice in how they demonstrate learning! Provide a variety of ways. Writing, drawing, creating, making, showing, speaking...

4  Use student surveys to find out what's working and not working, what students like and don't like!

5  Use a variety of lesson structures. Students should have opportunity to learn no matter their preferred learning style!

5 Ways to Improve Student Voice and Choice in the Classroom

#4OCF fouroclockfaculty.com

Responsibility and choice refers to the degree to which teachers allow students to make responsible decisions about their work in their classroom.

The teacher creates a classroom environment where democratic norms are put into place and where students provide meaningful input into the development of the norms and procedures of the classroom as well as the academic content or how the academic content is learned.

Learning Design & Instruction



- ▶ Students learn best when they make meaning of content that is connected to their prior learning and knowledge; use social skills to direct their own learning (e.g., awareness of current understanding, collaboration, communication, and help seeking) and co-constructing agreements of interactions with their peers.
- ▶ By engaging students in authentic practices, educators create opportunities that promote maximal development.
- ▶ Providing purposeful learning opportunities for young people—and strategic opportunities for brain development—requires educators to attend to the development of the whole child.

Cooperative Learning

Cooperative learning refers to a specific instructional task in which teachers have students work together toward a collective goal.

Teachers ask students to do more than group work; students are actively working with their peers around content in a meaningful way.

5 Basic Elements

positive interdependence	individual accountability	promoting one another's successes	applying interpersonal and social skills	group processing
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Group Discussions



- ▶ Group discussions provide students with opportunities to communicate their ideas and learn from their peers and teachers.
- ▶ Multiple factors influence the effectiveness of discussions, including educator expectations and planning; student personalities, skills and background knowledge; and the overall environment in which the conversation occurs.
- ▶ When group discussions happen in a supportive environment, students and educators are constantly building upon each other's thoughts, elaborating on their own thoughts, explaining their perspectives, and listening to others.
- ▶ When implementing inclusive group discussions, educators thoughtfully plan them in advance, intentionally and purposefully lead the discussion, implement them with student learning in mind, balance the talk between themselves and students, and prompt students to engage in more conversations.

Self-Assessment & Self-Reflection



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- ▶ Self-assessment and self-reflection are two distinct but interrelated educator practices that guide students towards identifying where gaps in knowledge and skills exist and enacting strategies to meet desired results.
- ▶ Self-assessment strategies allow students to evaluate their own work and identify any discrepancies between their current and desired knowledge or performance.
- ▶ Self-reflection occurs when students reflect on their learning progress, the strategies used to achieve results, and how they can incorporate those strategies to improve work in the future.
- ▶ When educators provide opportunities for students to authentically self-assess and self-reflect, they nurture students' skills to critically examine who they are, improve their metacognitive skills, as well as understand how their context influences and shapes their progress towards their goals in the learning environments.

4 Self-Assessment & Self-Reflection Practices

Math Self-Assessment Rubric

	4 Advanced	3 Proficient	2 Nearly Proficient	1 Emerging
 <p>Content</p>	I fully understand the math concept and could teach it to a classmate	I have a strong understanding of the math concept even though I may sometimes make a mistake	I am starting to understand the math concept but still need some help	I do not understand the math concept yet and I need a lot of help
 <p>Vocabulary</p>	I correctly used 4 new math terms in my project	I correctly used 3 new math terms in my project	I correctly used at least 1 new math term in my project	I did not incorporate any new math terms in my project
 <p>Mathematical Strategies</p>	I used the appropriate math strategy and my math computation was correct on the first try	I use the appropriate math strategy and my math computation was correct after 2 tries	I am still learning how to use the appropriate math strategy but am starting to understand it	I did not use the correct math strategy and my math computation is incorrect
 <p>Oral Presentation</p>	I can explain the math concept correctly using academic language	I can explain the math concept correctly using some academic language	I can explain the math concept correctly using everyday language	I cannot explain the math concept
<p>Customize based on project (teachers can customize this row based on activity)</p>				

- ▶ (1) create or co-create well-defined performance standards that students can accurately assess against;
 - ▶ (2) monitor progress throughout the process;
 - ▶ (3) offer students options to revise and improve upon their work based on self-assessment;
 - ▶ (4) help students reflect on how current learning (content and strategy) connects to previous learning and strategies to learn in the future.
-
- ▶ Through this process, educators help students answer three questions:
 - ▶ Where am I going, where am I now, and where to next?
 - ▶ When educators provide timely feedback as a part of self-assessment, students begin to understand that learning is a cyclical process that they can revise and enhance their work throughout the learning process.

Balanced Instruction

Balanced instruction refers to teachers using an appropriate balance between active instruction and direct instruction, as well as the appropriate balance between individual and collaborative learning.



Teachers provide students with opportunities to directly learn about the material as well as engage with the material.





Project based learning is an example of active instruction.

students are actively involved in solving a problem

students should plan, monitor, and reflect on their progress toward completion

Expectations & Rigor

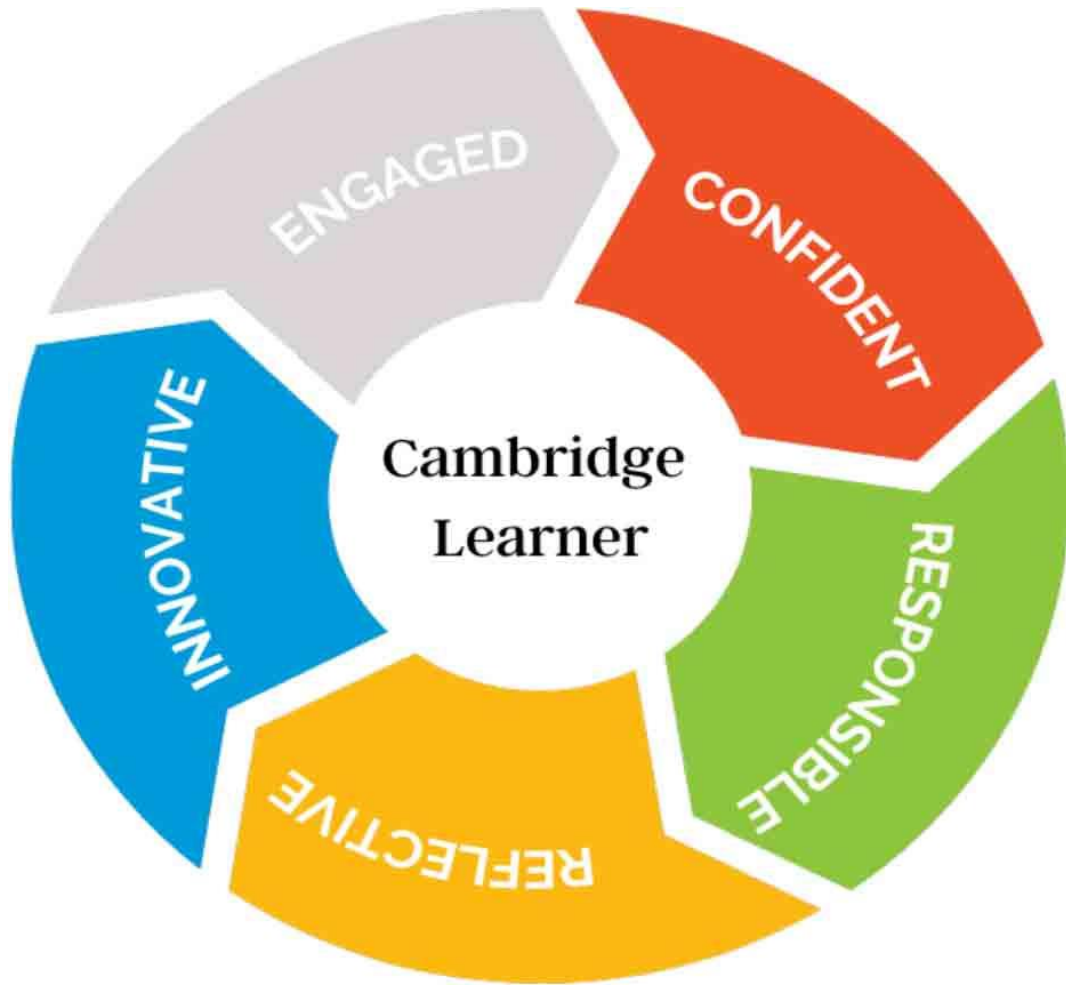
 IS...	IS NOT... 
<ul style="list-style-type: none">• MORE APPROPRIATELY CHALLENGING WORK• DEPTH OF KNOWLEDGE• CHALLENGING AND MOTIVATING• DEEPLY UNDERSTANDING COMPLEX IDEAS• APPLYING LEARNING TO NEW SITUATIONS• COMPLEX THINKING• QUALITY 	<ul style="list-style-type: none">• MORE WORK• DEPTH OF WORK• FRUSTRATING AND OVERWHELMING• ONE MORE THING TO DO• ALGORITHMIC AND SCRIPTED• DIFFICULTY• QUANTITY

Academic press refers to a teacher's implementation of meaningful and challenging work, and academic *expectations* focus on the teacher's belief that all students can and will succeed.

Students should sense that academics are extremely important, that the teacher wants them to succeed, and that they have to exert effort in challenging work in order to succeed.

Zone of proximal development

Attribute Building



- ▶ Attribute building occurs when teachers help develop the competencies systematically through the typical instructional cycle: goals/objectives of the lesson, introduction to new material/modeling, group and individual practice, and conclusion/reflection.
- ▶ Each part of the instructional cycle helps reinforce particular attributes, as long as the teacher integrates them into the lesson.
- ▶ Throughout the lesson, the teacher should model the attributes to the students.

Table Activity



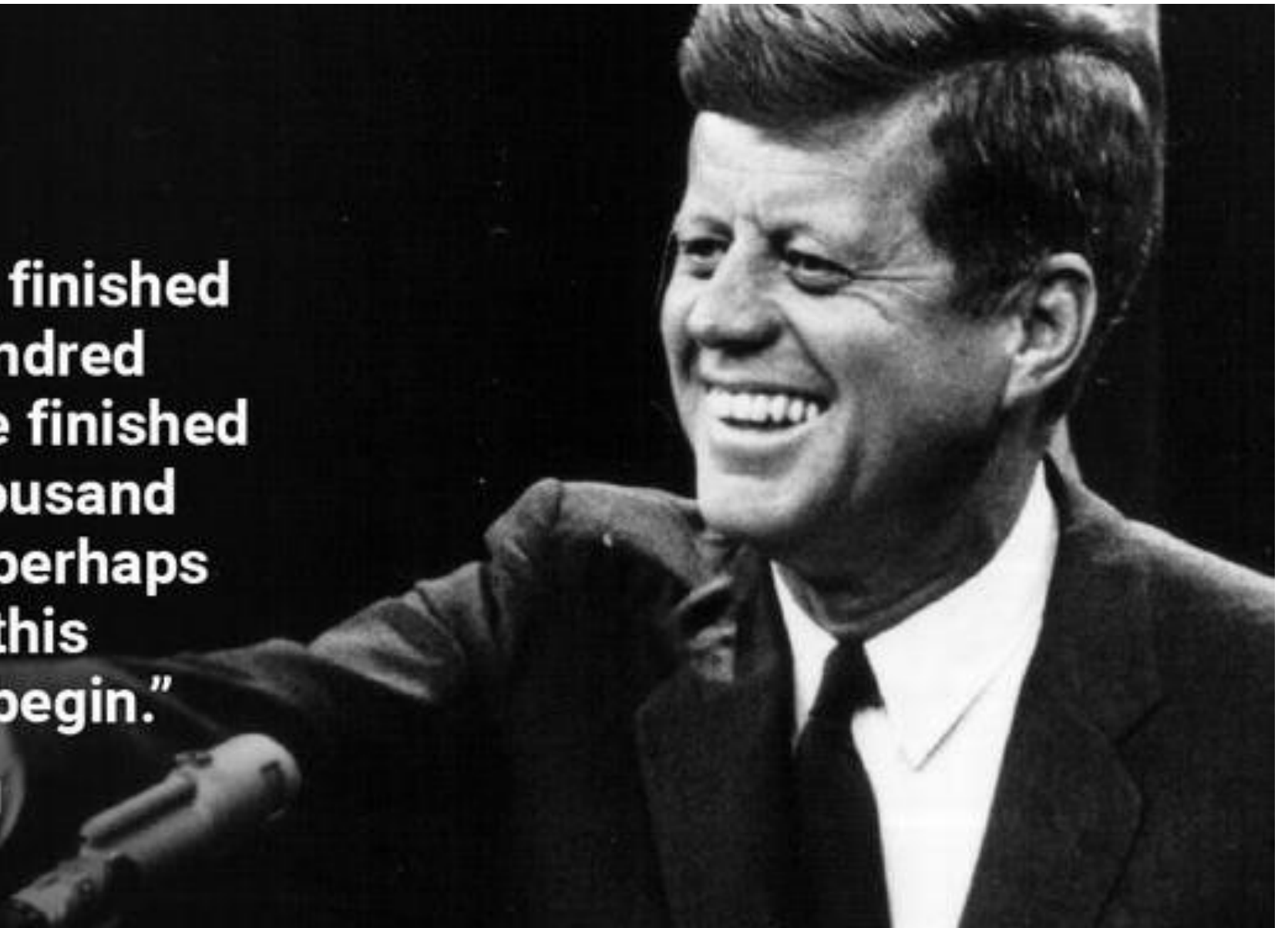
- ▶ Thinking about the strategies we discussed today...
 - ▶ What are you doing well?
 - ▶ Do you have activities or ideas that you can share with your tablemates?
- ▶ Which strategies are harder to implement?
 - ▶ Can you seek ideas from your tablemates?
- ▶ Is there a strategy or idea that you are excited to try out next school year?

“

All this will not be finished in the first one hundred days. Nor will it be finished in the first one thousand days . . . nor even perhaps in our lifetime on this planet. But let us begin.”

JOHN F. KENNEDY, 1961

BUSINESS INSIDER

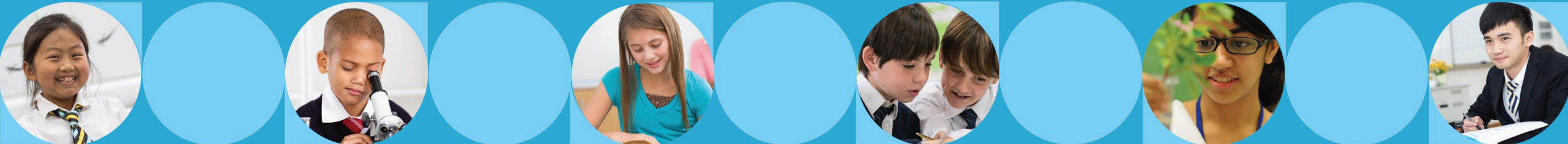




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Any questions?



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