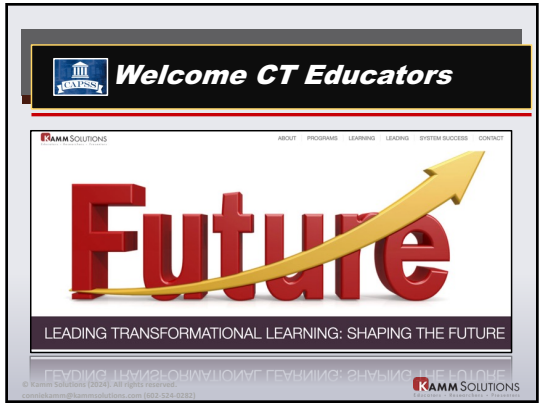

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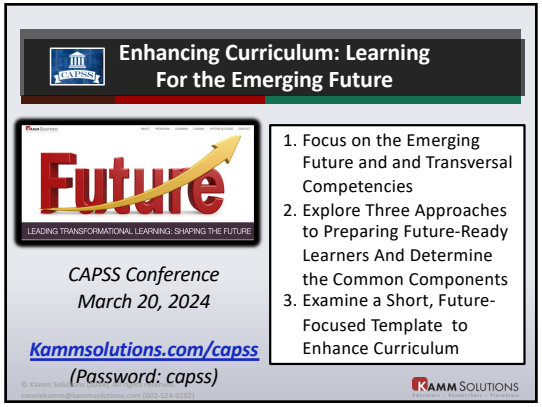

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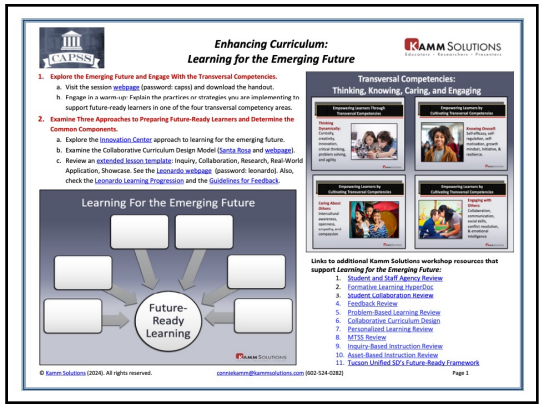

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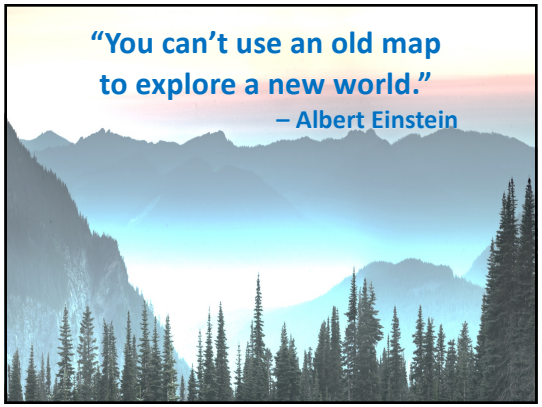

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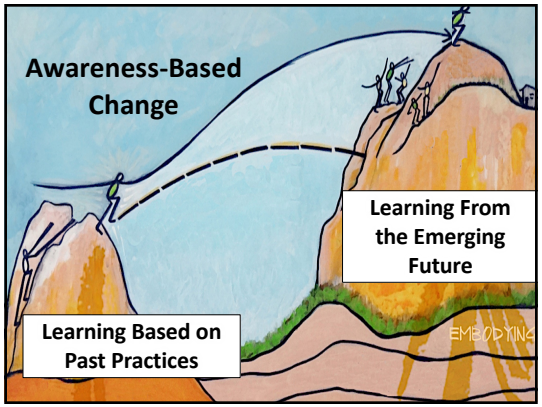

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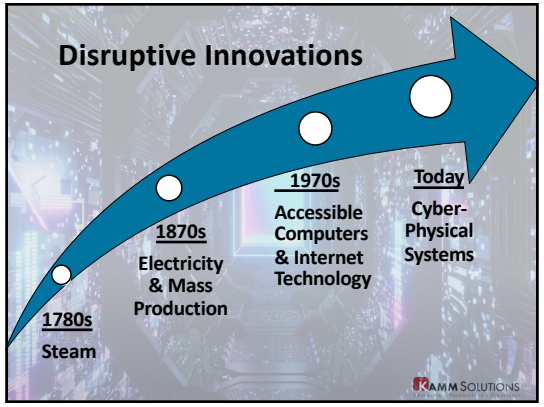

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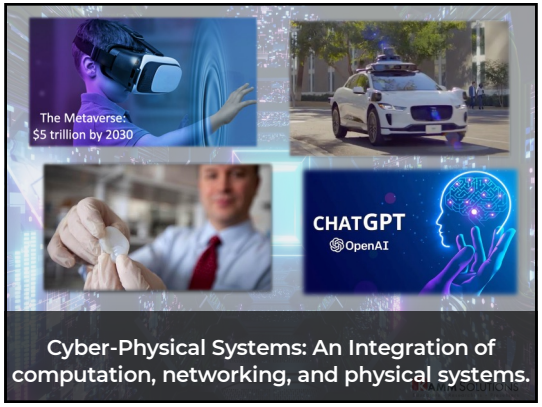

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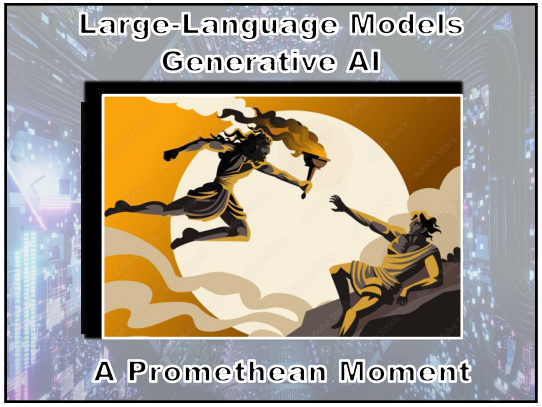

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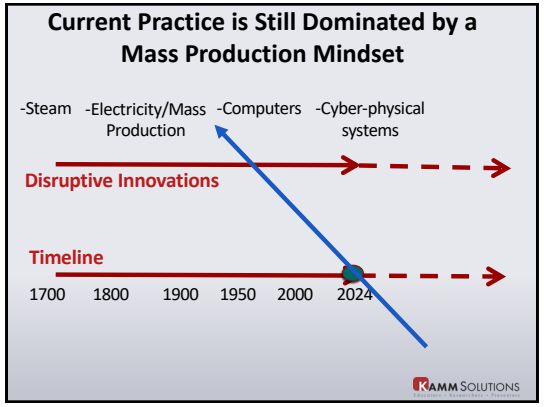

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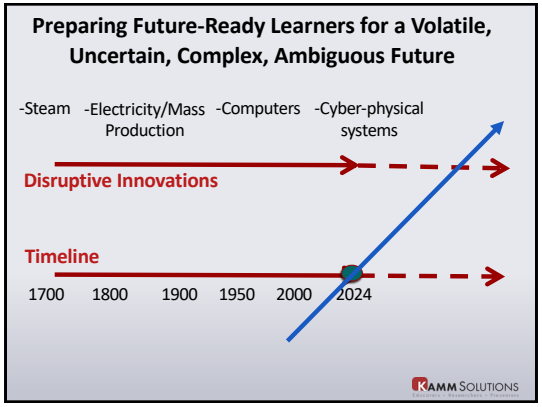

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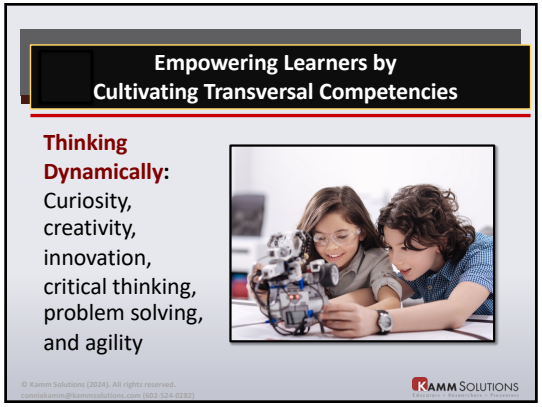

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Empowering Learners by Cultivating Transversal Competencies

Knowing Oneself: Self-efficacy, self-regulation, self-motivation, growth mindset, initiative, & resilience.

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Empowering Learners by Cultivating Transversal Competencies

Caring About Others: Intercultural awareness, openness, empathy, and compassion

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Empowering Learners by Cultivating Transversal Competencies

Engaging with Others: Collaboration, communication, social skills, conflict resolution, & emotional intelligence

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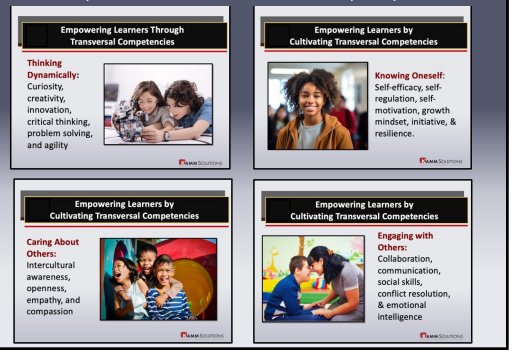
Please explain the practices or strategies you are implementing to support future-ready learners in one of the four transversal competency areas.



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University of Michigan Study on A Authentic, Inquiry-Based Learning

Project PLACE Learning

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Why is Authentic, Inquiry-Based Learning Effective?

- It engages the brain to make **connections** between what we know and what we are learning.
- We learn best when we **collaborate with others and look to one another for ideas, resources, and feedback** as opposed to one-way communication (creates oxytocin, a hormone the triggers brain architecture to develop).

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Why is Authentic, Inquiry-Based Learning Effective?

- It provides an opportunity for students to **enter learning from different places and pathways**, from their own knowledge and experience. It enables a classroom of variation and takes positive advantage of diversity.
- It creates **real and genuine transferrable knowledge** that is used again into adulthood (Ninety per cent of knowledge that is encountered once and spit back disappears; it isn't retrievable).

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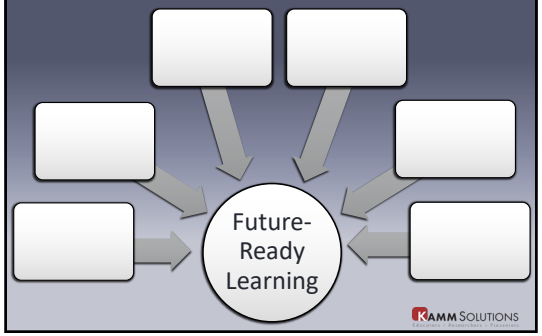
Learning For the Emerging Future



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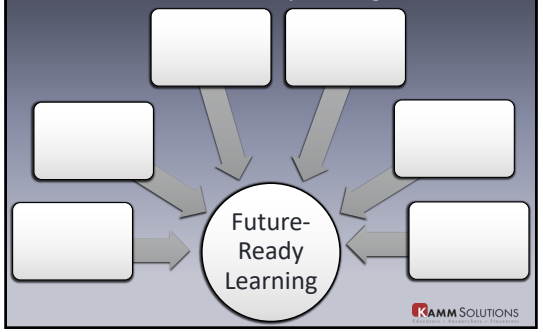
What are the primary components of future-ready learning?



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Multi High School Qualitative Study

Emerging Themes: Describe Specific Changes/Improvements You Would Like to See

1. **Know the students – build stronger student/ teacher relationships**
2. **Provide more hands-on learning experiences**
3. **Make classrooms personal (more personalized assignments and emphasize the students over the agenda)**
4. **Provide more student agency (Choice)**

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Multi High School Qualitative Study

Emerging Themes: Describe Specific Changes/Improvements You Would Like to See

5. **Plan more interesting, mentally enriching content; Limit busy work – worksheets**
6. **Ensure teachers demonstrate passion and interest for the subject they are presenting**
7. **Teach real-world skills/competencies**
8. **Provide more variation in lessons and approaches to learning; present interesting/mentally enriching content**

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How Did the District Rise to the Challenge?

INNOVATION CENTER

A program focusing on dynamic learning options designed to engage students in real-world projects with 91 community partners following a problem/solution-based learning framework

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Student Group Project: *THREADZ*

DRIVING QUESTION:

How can Team Threadz simultaneously implement an online inventory management system while promoting a social media presence, to manage product inventory, donations, outreach, and the ongoing needs of the three high school Threadz locations?

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The Innovation Center Teams

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Gen Z and Gen Alpha Characteristics

Characteristics	Gen Z (14 to 30)	Gen Alpha (Birth to 13)
Digital Natives	Grew up with the rise of the internet and smartphones, adept at using digital technology.	Born into a world where technology is even more ubiquitous, highly proficient in digital tools and platforms from an early age.
Diversity and Inclusion	Embrace diversity and inclusivity, value different cultures, identities, and perspectives.	Raised in increasingly diverse societies, exposed to various cultures and viewpoints from the start.
Influencer Culture	Familiar with influencer culture and social media, may aspire to become influencers.	Growing up immersed in social media, influenced by online personalities and digital trends.

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Gen Z and Gen Alpha Characteristics

Characteristics	Gen Z (14 to 30)	Gen Alpha (Birth to 13)
Global Awareness	Have a global perspective, connected to the world through the internet and social media.	Growing up in a globally connected world, aware of international events and issues from a young age. May participate in global activism and collaborate with peers across borders.
Flexible Work Preferences	Seek flexible work arrangements, value work-life balance and remote work opportunities.	Expect to have flexible work arrangements and prioritize work-life balance. May also navigate the gig economy and remote work dynamics.

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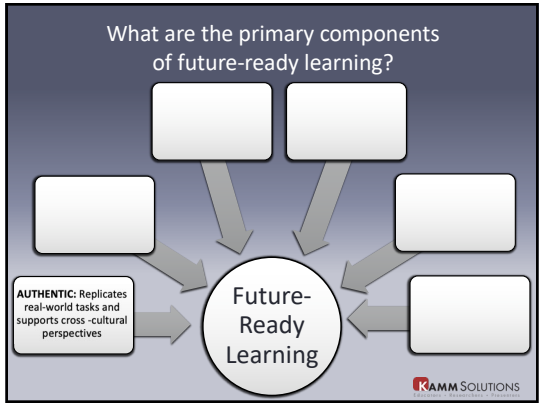

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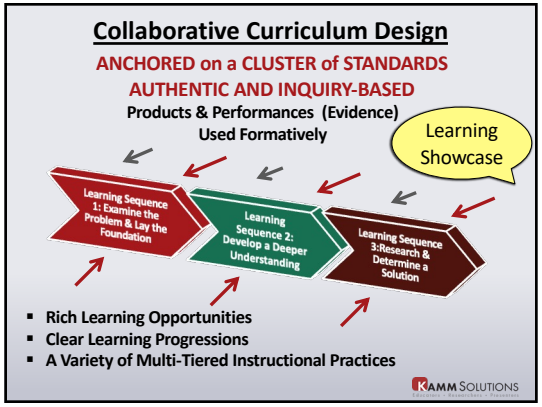

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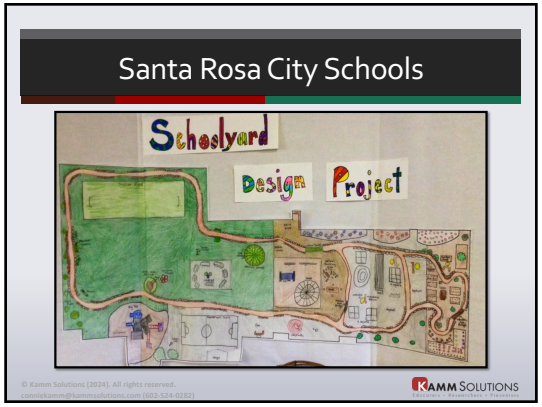

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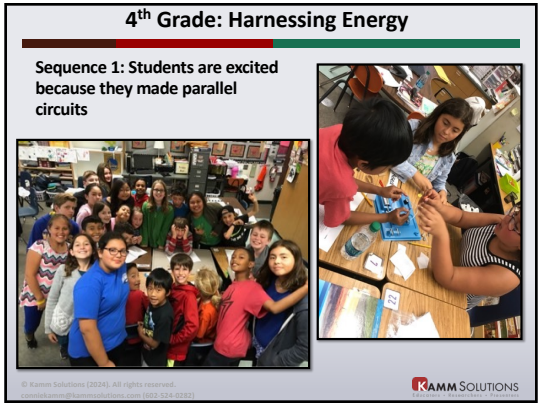

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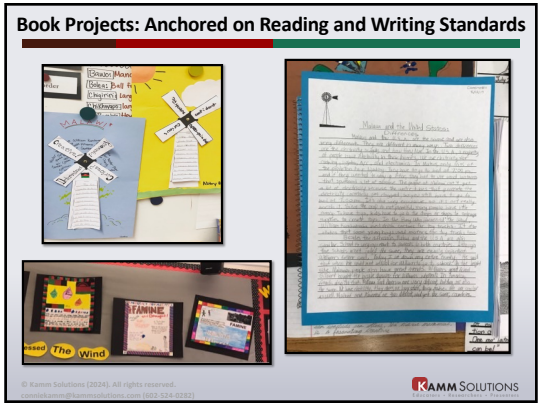

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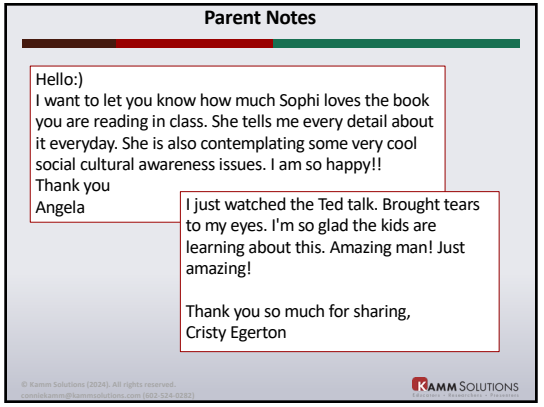

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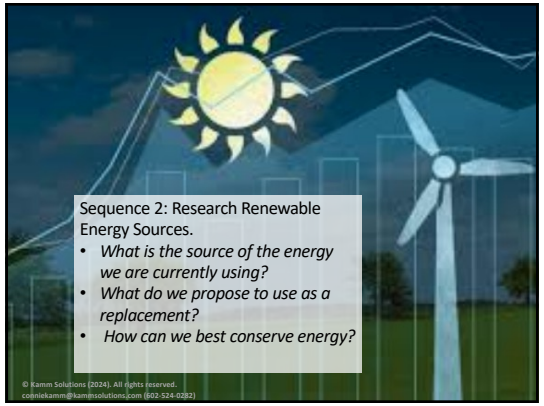

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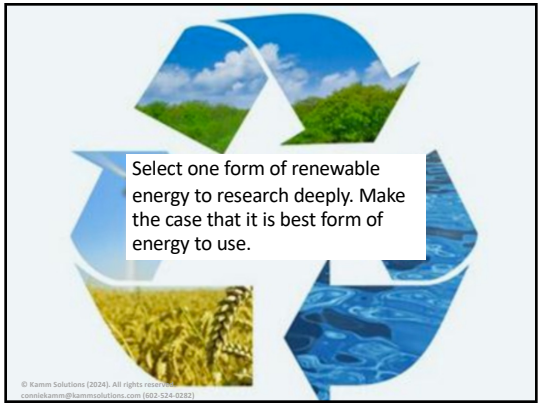

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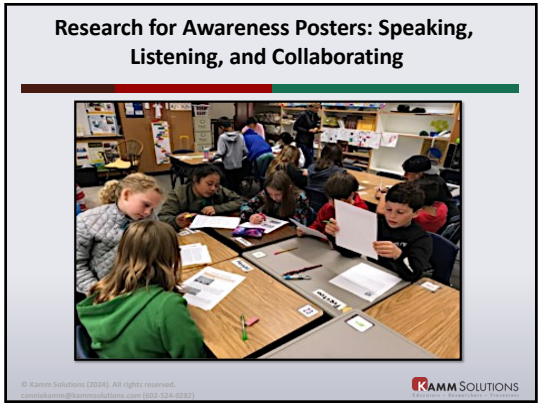

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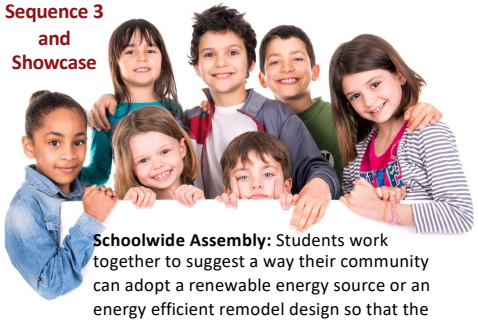
Sequence 3 and Showcase



Schoolwide Assembly: Students work together to suggest a way their community can adopt a renewable energy source or an energy efficient remodel design so that the school can decrease their carbon footprint and their reliance on nonrenewable energy.

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Brilliant Teachers Co-Create Units of Study

- Teachers' Demonstrate Innovation, Creativity, & Critical Thinking
- Engage in Collaborative Inquiry
- Infuse District's Resources
- Embrace Digital Tools

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100 % of teachers in two districts agreed/strongly agreed:

- **Closing the Achievement Gap**
- **Improving Executive Function**
- **Engaging Students as Active Learners**
- **Personalized – Exercising Voice and Choice**
- **Connecting with Social & Emotional Learning**

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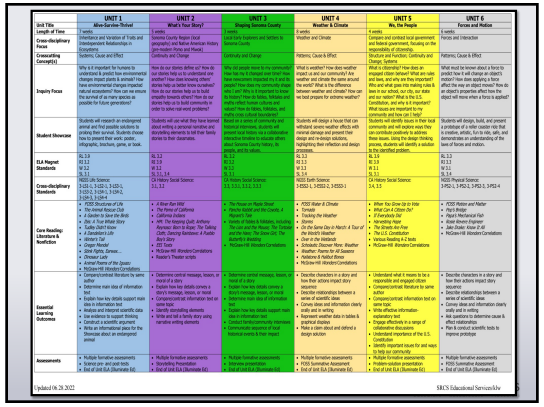

Unit Title	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6
	After Our Arms Thrived	What's Your Story?	Shaping Sonoma County	Weather & Climate	We, the People	Forces and Motion
Length of Time	9 weeks	9 weeks	9 weeks	9 weeks	9 weeks	9 weeks
Cross-disciplinary Focus	Interdependence and Variation of Traits and Interdependent Relationships in Ecosystems	Sonoma County Region (local geographic) and Native American History (pre-modern Pomo and Miwok)	Sonoma County History and Settlers in Sonoma County	Weather and Climate	Powers and conduct local government and federal government, focusing on the responsibility of citizenship.	Forces and Interactions
Crosscutting Concept(s)	Systems; Cause and Effect	Continuity and Change	Continuity and Change	Patterns; Cause & Effect	Structure and Function; Continuity and Change; Systems	Patterns; Cause & Effect
Inquiry Focus	Why is it important for humans to understand & predict how environmental changes impact ecosystems? How can we have environmental changes impactful natural ecosystems? How can we ensure the survival of as many species as possible for future generations?	How do our stories define us? How do our stories help us to understand one another? How can we ensure that our stories help us better know ourselves? How do our stories help us to build empathy towards others? How do our stories help us to build community in order to solve real-world problems?	Who still people resort to my community? How has city to changed over time? How do people impact their community? How do events? How does my community shape who I am? Why is it important to know its history? How do bikes, hillsides and myths reflect human culture and values? How do plans, debates, and politics shape our community?	What is weather? How does weather impact us and our community? Are weather patterns the same in all parts of the world? What is the difference between weather and climate? How can we best prepare for extreme weather?	What is citizenship? How does an engaged citizen behave? What are rules and laws? Why are they important? Who are what goes into making rules & laws in our school, our city, our state and our nation? What is the U.S. Constitution, and why is it important? What are the responsibilities of people and how can I live by them?	What must be known about a force to predict how it will change an object's motion? How can we change how a force affect the way an object moves? How do an object's properties affect how the object will move when a force is applied?
Student Showcase	Students will research an endangered animal and find possible solutions to prolong their survival. Students choose how to present their work: poster, infographic, brochure, game, or book.	Students will use what they have learned about writing a personal narrative and storytelling elements to tell their family stories to their classmates.	Based on a series of community and historical interviews, students will present local history via a collaborative interactive timeline to educate others about Sonoma County history, its people, and its values.	Students will design a house that can withstand severe weather effects with minimal damage and present their design and re-design solutions, highlighting their reflection and design process.	Students will identify issues in their local community and will explore ways they can contribute positively to address these issues. Using the design thinking process, students will identify a solution to the identified problem.	Students will design, build, and present a prototype of a roller coaster ride that is creative, artistic, fun to ride, safe, and demonstrates an understanding of the laws of forces and motion.
ELA Magnet Standards	RL 1.3 RI 1.2 W 1.2 SL 1.1	RL 1.3 RI 1.9 W 1.2 SL 1.1; 1.4	RL 1.3 RI 1.2 W 1.2 SL 1.1	RL 1.3 RI 1.1 W 1.1 SL 1.1	RL 1.3 RI 1.0 W 1.1 SL 1.1	RL 1.3 RI 1.1 W 1.1 SL 1.4
Cross-disciplinary Standards	NGSS Life Science: 1-LS1-1; 1-LS3-1; 1-LS1-2; 1-LS1-3; 1-LS3-2; 1-LS1-4	CA History Social Science: 1.1; 1.1	U.S. History Social Science: 3.1; 3.1.1; 3.1.2; 3.1.3	NGSS Earth Science: 3-ESS2-1; 3-ESS2-2; 3-ESS3-1	CA History Social Science: 3.4; 3.5	NGSS Physical Science: 3-PS2-1; 3-PS2-2; 3-PS2-3; 3-PS2-4
Core Reading: Literature & Nonfiction	• FOSS Structures of Life • The Animal Rescue Club • A Garden to Save the Birds • Dot: A True Whale Story • Turtle Didn't Know • Wolf Island Story • Winter's Tail • Dragon Needs! • Stink Fights, Famous… • Dinosaur Lady • Animal Poems of the Oceans • McGraw-Hill Wonders Correlations	• A Share Rain Wolf • The Three of California • California Indians • NPR: The Keeping Quilt; Anthony Kiyowaza: Born to Kayak; The Talking Eggs; Jonathan Rainbow; A Puzzle Born Story • EDI Texts • McGraw-Hill Wonders Correlations • Reader's Theater scripts	• The Treasure on Maple Street • Pancho Rabbit and the Coyote: A Migrant's Tale • Variety of Native & Folktales, including The Girl and the Bear; The Tortoise and the Hare; Coyote Goes Cold; The Rockfish's Wedding • McGraw-Hill Wonders Correlations	• FOSS Water & Climate • Cumulo • Tracking the Weather • Storms • On the Same Day in March: A Tour of Weather Around the World • Clear in the Weekend • Scholastic Discover More: Weather • Weather: Poems for All Seasons • Parkdome & Paddock Bones • McGraw-Hill Wonders Correlations	• When You Grow Up to Vote • What Can a Citizen Do? • If Everybody Did • Harvesting Hope • The Streets Are Free • The Day Gogo Went Vote • Various Reading A-Z books • McGraw-Hill Wonders Correlations	• FOSS Motion and Matter • Pop's Bridge • Pippin Mechanical Fish • Rosie Revere Engineer • Jake Drake: Know It All • McGraw-Hill Wonders Correlations
Essential Learning Outcomes	• Describe characters in a story and how their actions impact story sequence • Determine main idea of information text • Explain how key details support main idea in informational text • Use evidence to support thinking • Construct a scientific argument • Write an informational piece for the Showcase about an endangered animal	• Describe characters in a story and how their actions impact story sequence • Determine central message, lesson, or moral of a story • Explain how key details convey a story's message, lesson, or moral • Compare/contrast information text on the same topic • Identify storytelling elements • Write and tell a family story using narrative writing elements	• Determine central message, lesson, or moral of a story • Explain how key details convey a story's message, lesson, or moral • Determine main idea of information text • Explain how key details support main idea in information text • Construct formal/summarize interviews • Communicate sequence of local historical events & their impact	• Describe characters in a story and how their actions impact story sequence • Describe relationships between a series of scientific ideas • Use text features to find information clearly orally and in writing • Represent weather data in tables & graphical displays • Make a claim about and defend a design solution	• Understand what it means to be a responsible and engaged citizen • Compare/contrast literature to same author • Compare/contrast information text on the same topic • Write effective information/explanatory text • Engage effectively in a range of collaborative discussions • Understand importance of the U.S. Constitution • Identify important issues for and ways to help our community	• Describe characters in a story and how their actions impact story sequence • Describe relationships between a series of scientific ideas • Use text features to find information clearly orally and in writing • Ask questions to determine cause & effect relationships • Plan & conduct scientific tests to improve prototype
Assessments	• Multiple formative assessments • Science pre- and post-tests • End of Unit ELA (Illuminate Ed)	• Multiple formative assessments • Storytelling Presentation • End of Unit ELA (Illuminate Ed)	• Multiple formative assessments • Interview presentation • End of Unit ELA (Illuminate Ed)	• Multiple formative assessments • FOSS Summative Assessment • End of Unit ELA (Illuminate Ed)	• Multiple formative assessments • Problem-solution presentation • End of Unit ELA (Illuminate Ed)	• Multiple formative assessments • FOSS Summative Assessment • End of Unit ELA (Illuminate Ed)

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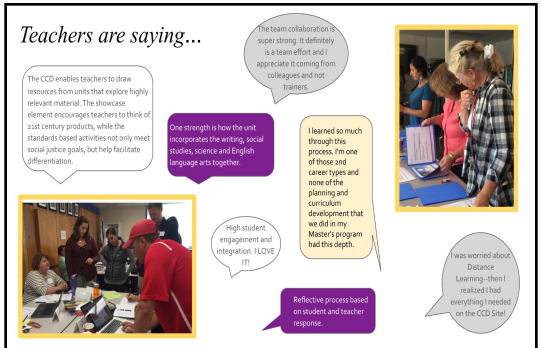
Teachers are saying…



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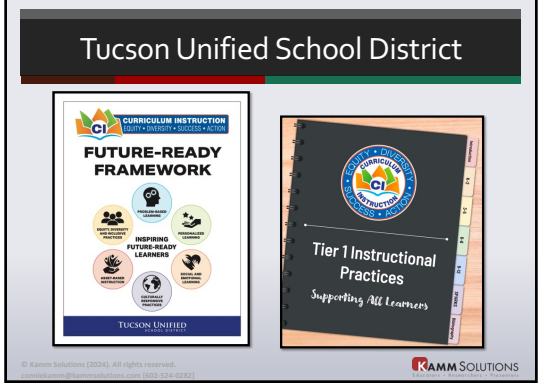

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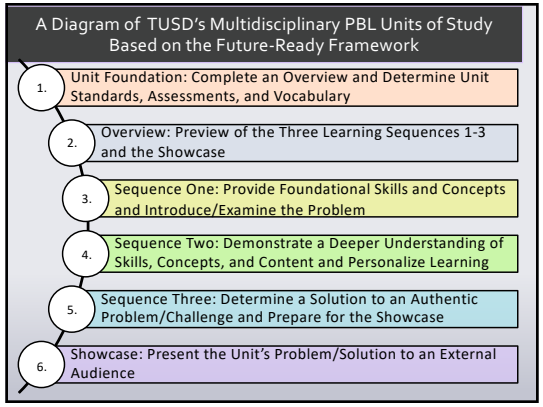

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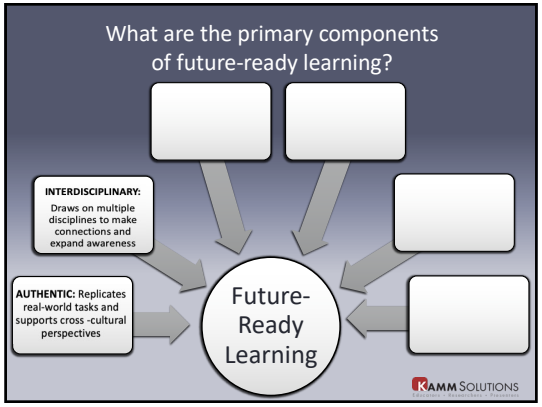

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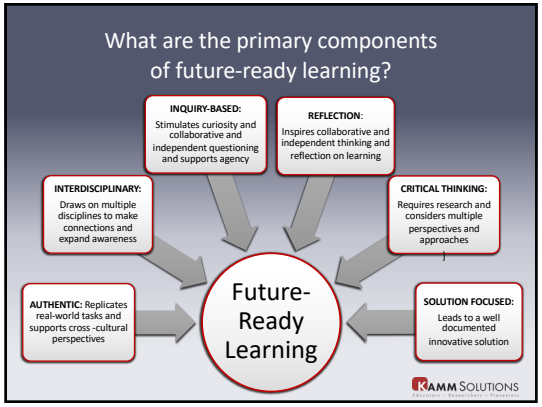

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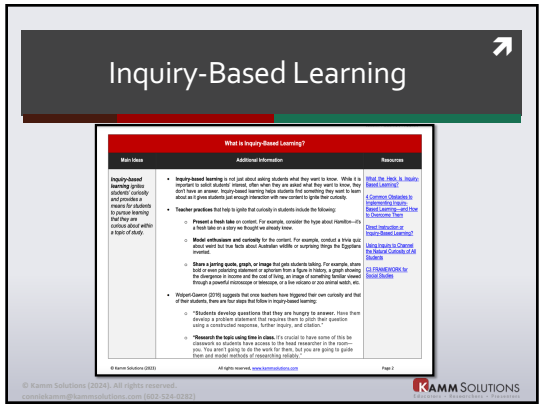

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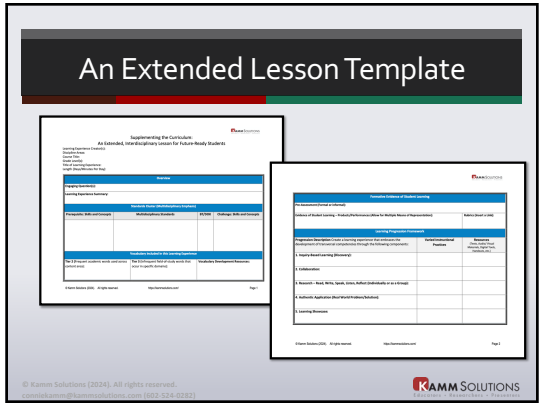

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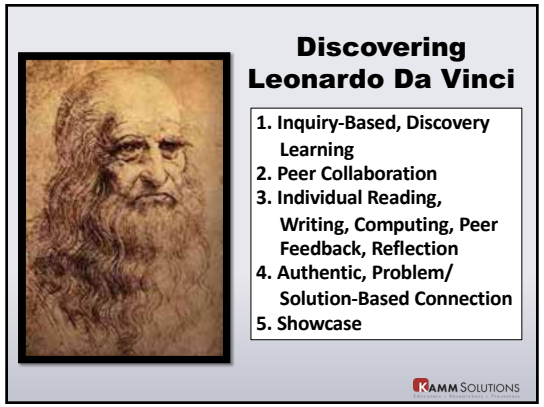

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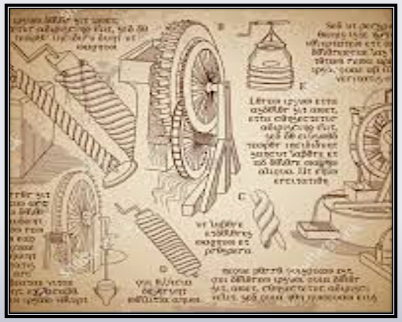
What do you observe in this picture?



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What is your response to this picture? What do you think and/or feel when you look it? Please explain your response.

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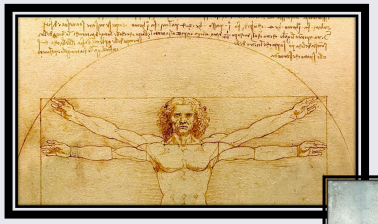

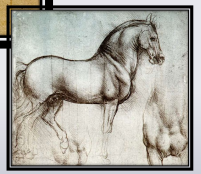

What do these sketches tell you about the artist?

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Discovering Da Vinci

If Leonardo da Vinci were here, what would you want to ask him?

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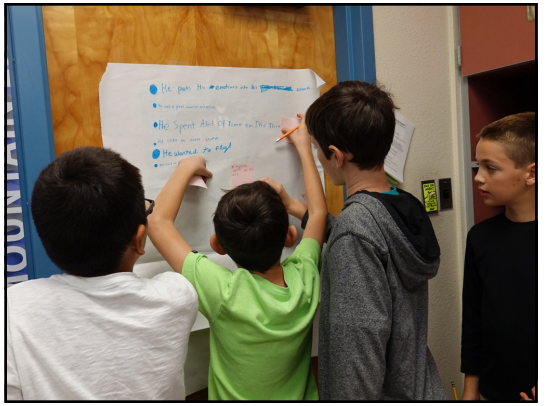

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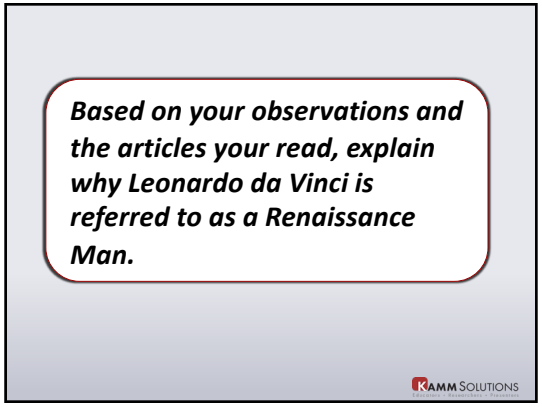

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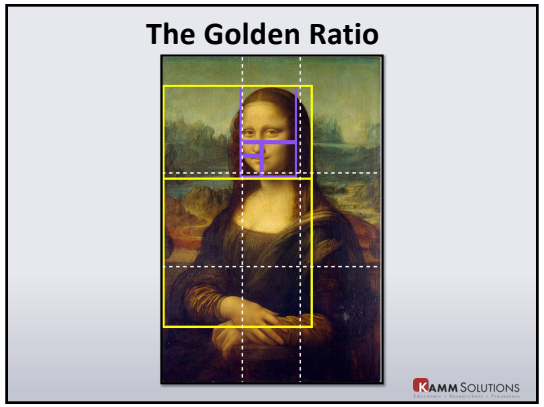

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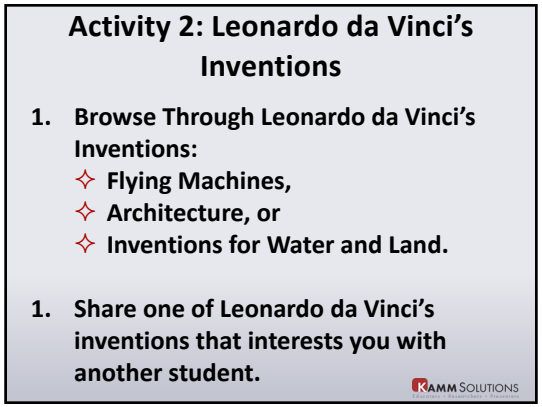

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Put Your Genius to Work

The challenge: Determine a problem faced in the world today and design an invention to address that problem. Include detailed notes to support your design. How does your invention work? What challenges could your invention face? What could be a solution?

- ✧ Clean water
- ✧ Air pollution
- ✧ Plastic pollution
- ✧ Climate change
- ✧ Homelessness

Create your own codex

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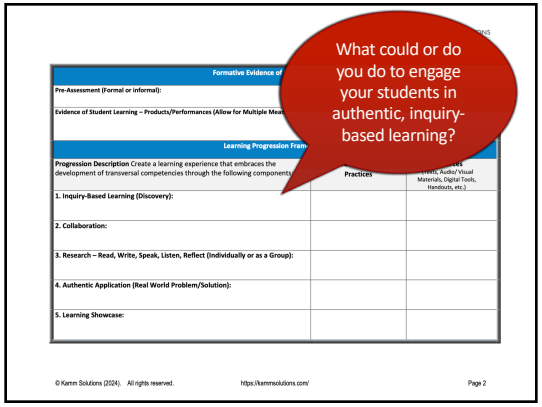

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