DRAFT – Unofficial Until Approved
Meeting Minutes 10/8/2015

The Governing Board of the Tanque Verde Unified School District #13, Pima County, Tucson, Arizona held a Regular Session on October 8, 2015 in the Board Room, at the Tanque Verde Unified School District Administrative Office, at 2300 N. Tanque Verde Loop Rd., Tucson, Arizona 85749. The meeting was called to order at 7:02 p.m.

1. ROLL CALL

Board Members present:

Dr. Peter Livingston, President (absent)	Ms. Susan Fry, Board Member
Mr. Carlos Ruiz, Clerk	Mr. Jeffrey Neff, Board Member
Mr. Steven Auslander, Board Member	Tino Watson, Student Board Member

Administrative Staff:
Ms. Kimberly C. Sharp, Superintendent
Mr. Adam Hamm, Business Manager

2. APPROVAL OF AGENDA

MOTION: Mr. Auslander made a motion to approve the agenda. Mr. Neff seconded; the motion carried unanimously.

3. REPORTS

- **Student Board Member Report – Tino Watson**

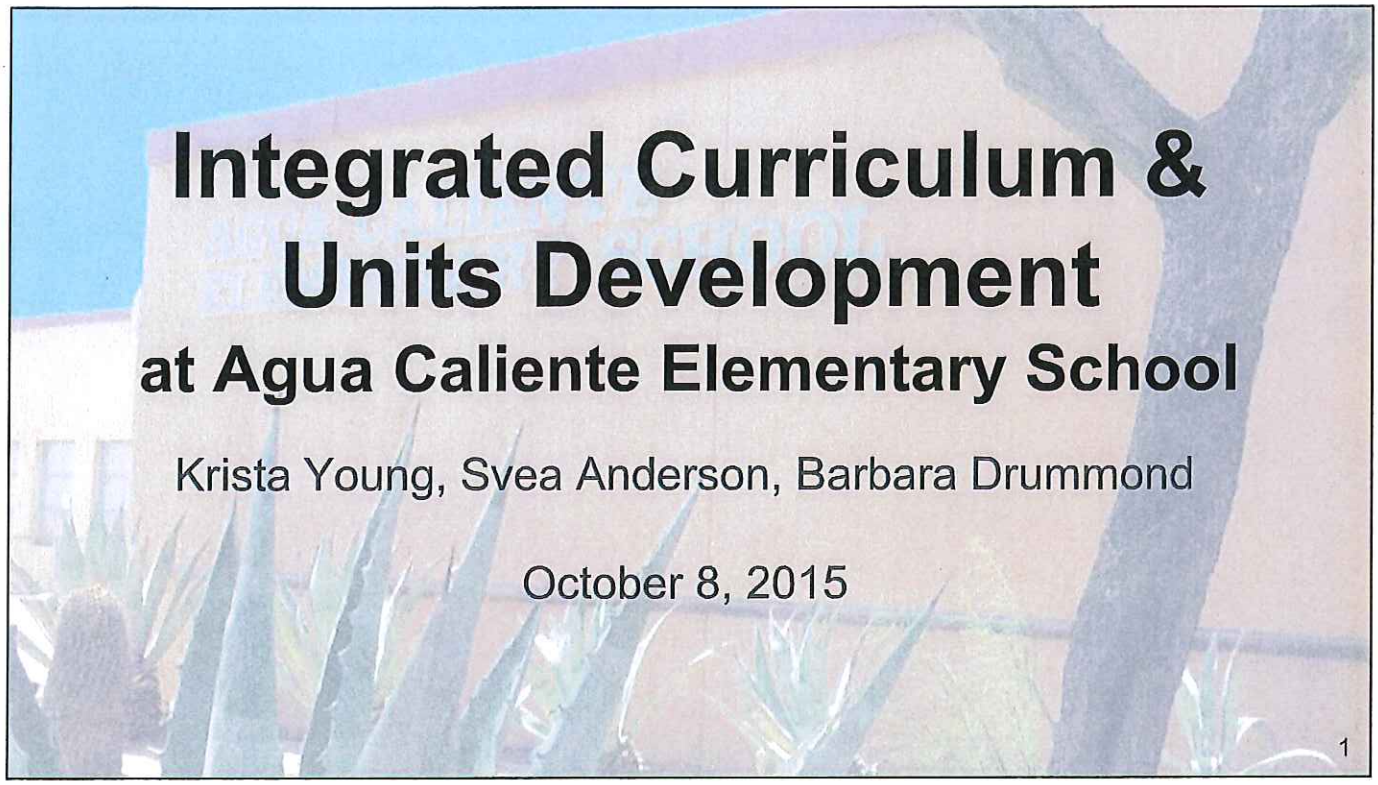
  Recent:
  - The school district held Career Day at all the schools on September 25th. The event was a huge success on all campuses.
  - TVHS StuCo held its annual Blood Drive at TVHS on September 28th.
  - TVHS band attended its first band competition of the year on September 26th in Phoenix. They received a rating of "Good" with special recognition for Visual Performance and Auxiliary (color guard).
  - TVES hosted its annual book fair from September 28th - October 3rd.
  - TVHS Homecoming is this week! This year's theme is "A Haunted Homecoming", a Halloween theme based on scary movies. The Homecoming football game will be tomorrow at 7:00.
  - TVHS StuCo is holding tutoring sessions for Emily Gray students at Emily Gray.
  - TVHS Spanish Club has recently been going to local libraries and reading in Spanish to children.
  - TVHS DECA Club held a carwash fundraiser at Crossroads Coffee on October 3rd.
  - ACES held a Mother-Son Minute To Win It event on September 25th. This event involved fun competitions between different mother-son teams.
  - TVHS SkillsUSA attended the annual Employee Leadership Conference in Phoenix on October 1st. TVHS members gained valuable employability and leadership skills.

  Future:
  - EGJH will be hosting a superhero-themed Halloween dance later in October.

Personnel Items - Board Meeting - October 8, 2015

Administrator Contracts	Position	Reason	Site	FTE	Salary	Date
Certified Contracts	Position	Reason (Replace / New)	Site	FTE	Salary	Date
Certified Resignations						
Debra Webber	Teacher	Requests return as ESI Ee - 2nd half of SY 15/16	EGJH	1.00	$42,293.00	12/18/2015
Classified Contracts	Position	Reason (Replace / New)	Site	FTE	Wage	Date
Classified Agreements	Position	Reason (Replace / New)	Site	FTE	Wage	Date
Other Continuations	Position	Reason (Replace / New)	Site	FTE	Wage	Date
Pam Koraleski	Food Services Assistant	Internal Transfer/Replace Selene Jones	TVES	0.63	$9.41	10/19/2015
Debra Webber	Teacher	ESI agreement begins 1/4/16 to 5/26/16	EGJH	1.00	$19,204.25	1/4/2016
Classified Resignations	Position	Reason	Site	FTE	Wage	Date
Meara Lesho	Paraprofessional I	Resignation	ACES	0.67	$9.56	10/9/2015
Other Discontinuations	Position	Reason	Site	FTE	Wage	Date
Other New Hires	Position	Reason	Site	FTE	Wage	Date
Jesse South	Assistant Boys Soccer Coach	Replace Tim Venne	TVHS	Varies	$2,008.00	SY 15-16
Mike Livermore	Head Golf Coach	Replace Bill Kipling	TVHS	Varies	$2,868.00	SY 15-16
Demetra Wright	Certified Substitute	New	Varies	Varies	Sub Pay	SY 15-16
Photini Deshaes	Certified Substitute	New	Varies	Varies	Sub Pay	SY 15-16
Lisa Nowacki Hubble	Volunteer Boys Soccer Coach	New	TVHS	Varies	$0.00	SY 15-16
Elliot Pope	Certified Substitute	New	Varies	Varies	Sub Pay	SY 15-16

/K. Wick 10/2/2015



Thanks for time.
Pass out: Kinder binder for forces/motion. Example Integrated Notebooks from 5th.
Handouts:

- Presentation
- p.1 Kinder week 1 overview, forces/motion unit
- p.2 Key features of upper elementary integrated units
- p.3-4 Summary of E/LA and Math standards 5th grade (highlight is coverage for example Unit 1 - Project 2)
- p.5-6 Month-by-month map of curriculum/units for 5th grade integrated pilot
- p.7-8 Day-by-day summary of Unit 1 for 5th grade integrated pilot

Brief intro to what we are doing at ACES
Glimpse into: 1) thought process, 2) materials development, 3) path forward
Brief, try to keep to 15 min: 1) happy to answer any questions, 2) put together a packet of information/reading that goes into more detail

Curriculum Development

"To design a school curriculum backward from the goal of autonomous transfer requires a deliberate and transparent plan for helping the student rely less and less on teacher hand-holding and scaffolds. After all, transfer is about independent performance in context. You can only be said to have fully understood and applied your learning if you can do it without someone telling you what to do. In the real world, no teacher is there to direct and remind you about which lesson to plug in here or what strategy fits there; transfer is about intelligently and effectively drawing from your repertoire, independently, to handle new situations on your own. Accordingly, we should see an increase, by design, in problem- and project-based learning, small-group inquiries, Socratic Seminars, and independent studies as learners progress through the curriculum across the grades."

McTighe, J. & Wiggins, G. (2012). From Common Core to Curriculum: Five Big Ideas. Retrieved from https://grantwiggins.files.wordpress.com/2012/09/mctighe_wiggins_final_common_core_standards.pdf.

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www.authenticeducation.org/

One of the readings is an article "From Common Core to Curriculum: Five Big Ideas" written by heavyweights in curriculum design, Jay McTighe and Grant Wiggins. (written many articles and books, developed the process Understanding by Design)

The next two pages are quotes from their article… read quotes

Curriculum Development

"Thus...the first question for curriculum writers is not:

What will we teach and when should we teach it?

Rather the initial question for curriculum development must be goal focused:

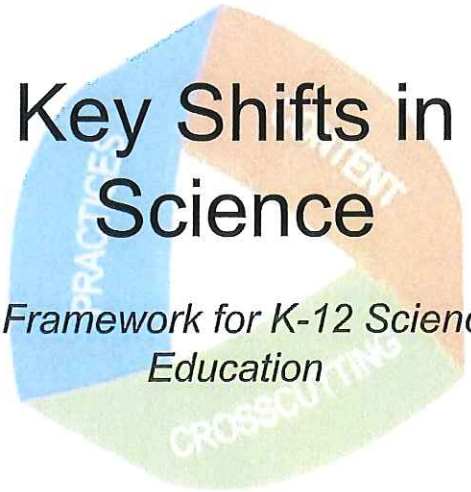
Having learned key content, what will students be able to do with it?"

McTighe, J. & Wiggins, G. (2012). From Common Core to Curriculum: Five Big Ideas. Retrieved from https://grantwiggins.files.wordpress.com/2012/09/mctighe_wiggins_final_common_core_standards.pdf.

Real shift in thinking about what students learn and how they show that learning/understanding.
This is reflected in the newer standards that have come out, including Arizona

Key Shifts in Science

A Framework for K-12 Science Education



- **How scientists think and do science** rather than what they know
- Science & engineering as an **iterative processes**
- Key content and core ideas based on **learning progressions that spiral** throughout K-12
- Foundational dimensions that address **practices, content and cross-cutting concepts**

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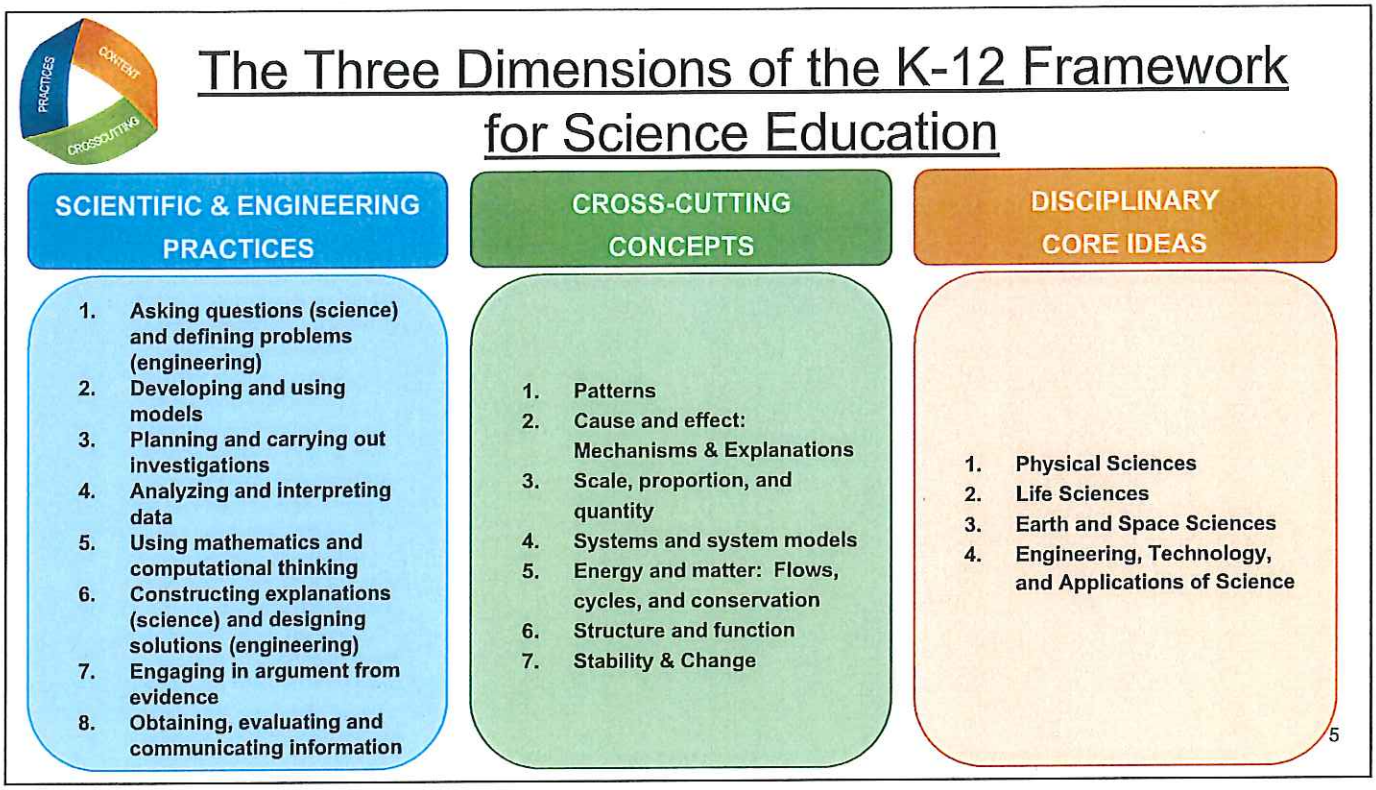
Svea - talk about the direction of the ADE with science standards.
While the AZ standards might focus on more factual knowledge, they are built upon the K-12 framework.



This framework is based on three dimensions critical to learning - S&E Practices, Cross-cutting concepts, DCI.
These are titled a framework for science education, but these go far beyond science...
These are what is called for in the key changes in E/LA and Math via common core/ACCRS

Key Shifts In English Language Arts

- Regular practice with **complex texts** and their academic language
- Reading, writing, and speaking **grounded in evidence from texts**, both literary and informational
- **Building knowledge** through content-rich nonfiction

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http://www.corestandards.org/other-resources/key-shifts-in-english-language-arts/

Directly from the ACCRS standards for ELA
From http://www.corestandards.org/other-resources/key-shifts-in-english-language-arts/

K-12 Framework for Science Education

SCIENTIFIC & ENGINEERING PRACTICES	CROSS-CUTTING CONCEPTS	DISCIPLINARY CORE IDEAS
1. Asking questions (science) and defining problems (engineering) 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking 6. Constructing explanations (science) and designing solutions (engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating and communicating information	Generating and analyzing evidence-based, complex text & data	Sources of content-rich nonfiction 1. Physical Sciences 2. Life Sciences 3. Earth and Space Sciences 4. Engineering, Technology, and Applications of Science

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Key Shifts In Mathematics

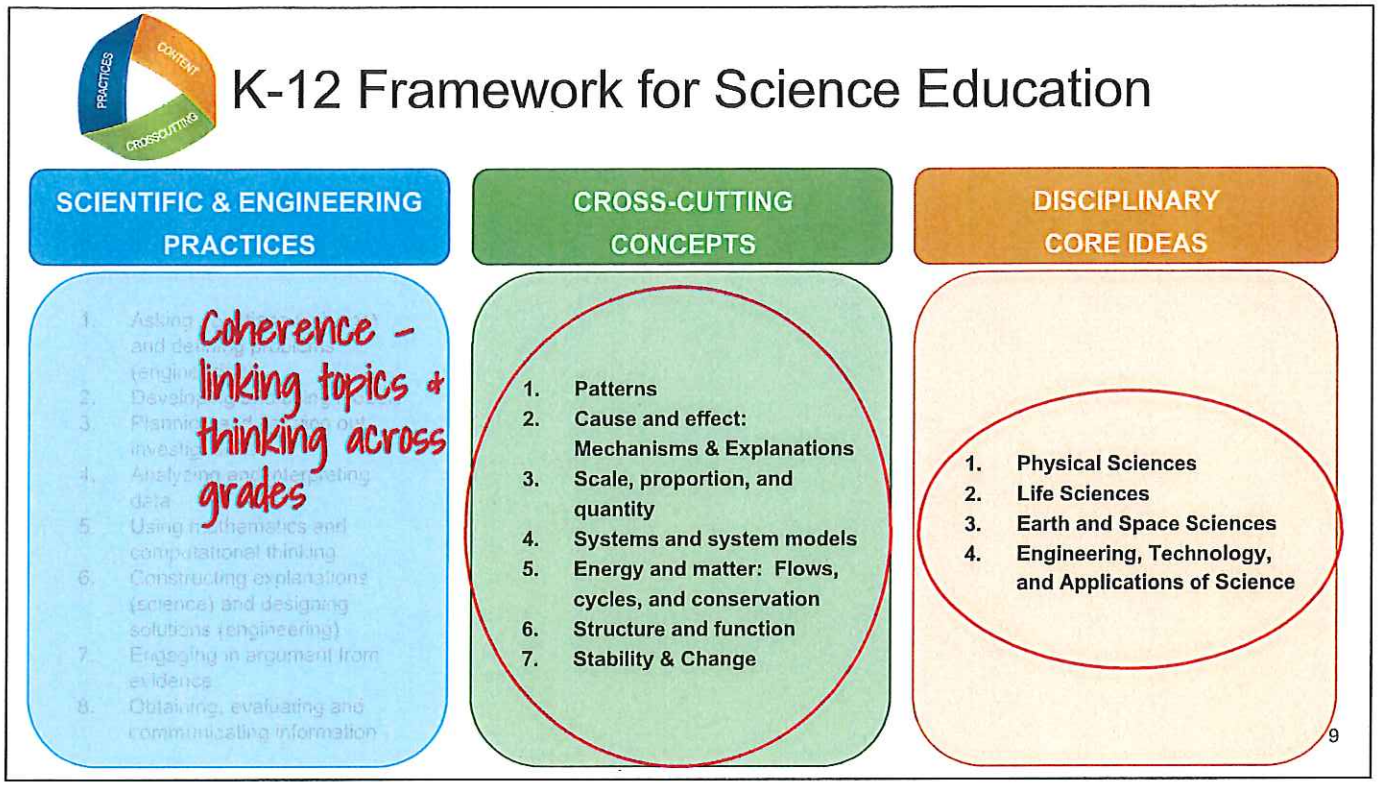
ARIZONA'S COLLEGE AND CAREER READY STANDARDS

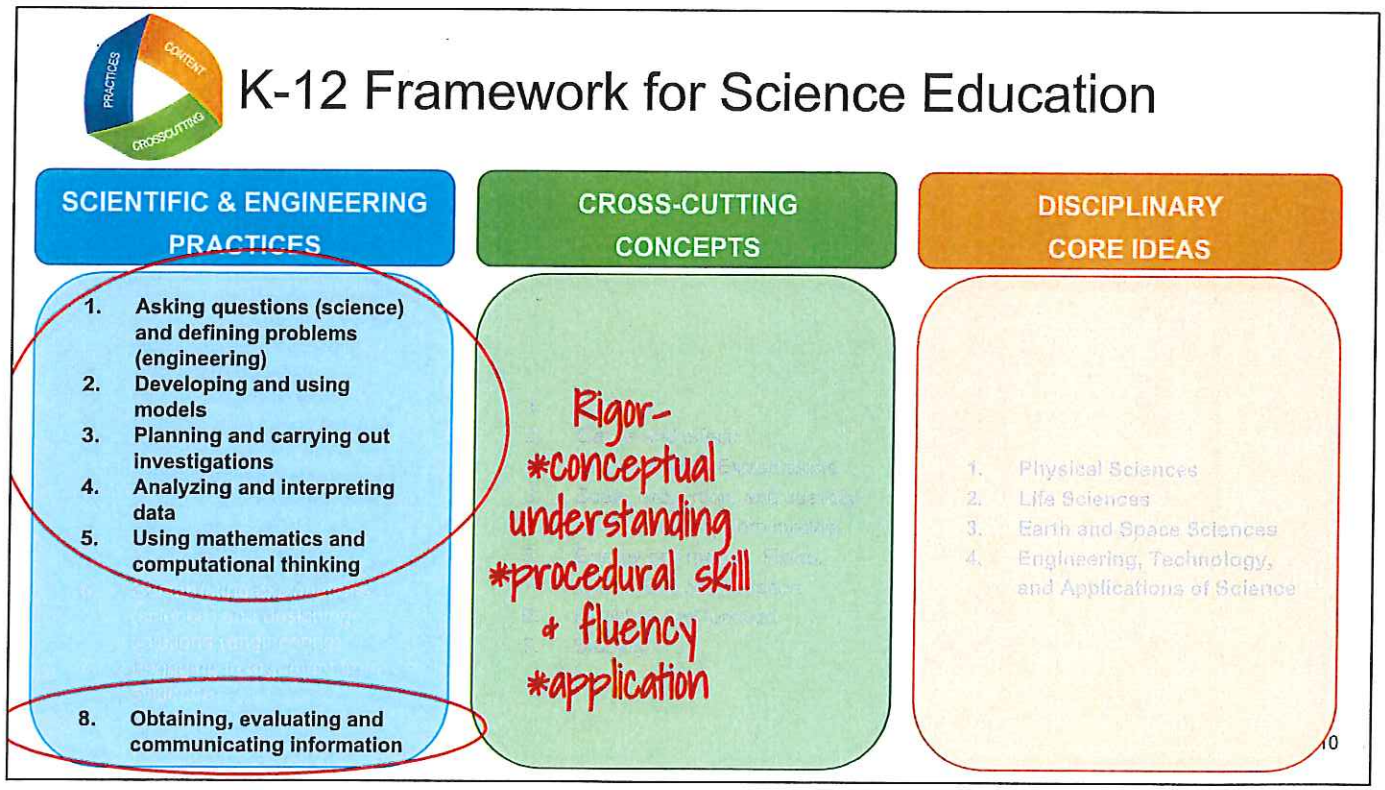
- Greater **focus** on fewer topics
- **Coherence**: Linking topics and thinking across grades
- **Rigor**: Pursue conceptual understanding, procedural skills and fluency, and application with equal intensity

8

http://www.corestandards.org/other-resources/key-shifts-in-mathematics/

Directly from ACCRS math
From http://www.corestandards.org/other-resources/key-shifts-in-mathematics/





These go beyond science and engineering. These are what is called for in the key changes in E/LA and Math via common core/ACCRS

Integration across multiple core areas

"While the Standards delineate specific expectations in reading, writing, speaking, listening, and language, each standard need not be a separate focus for instruction and assessment. Often, ***several standards can be addressed by a single rich task****." (p. 5)*

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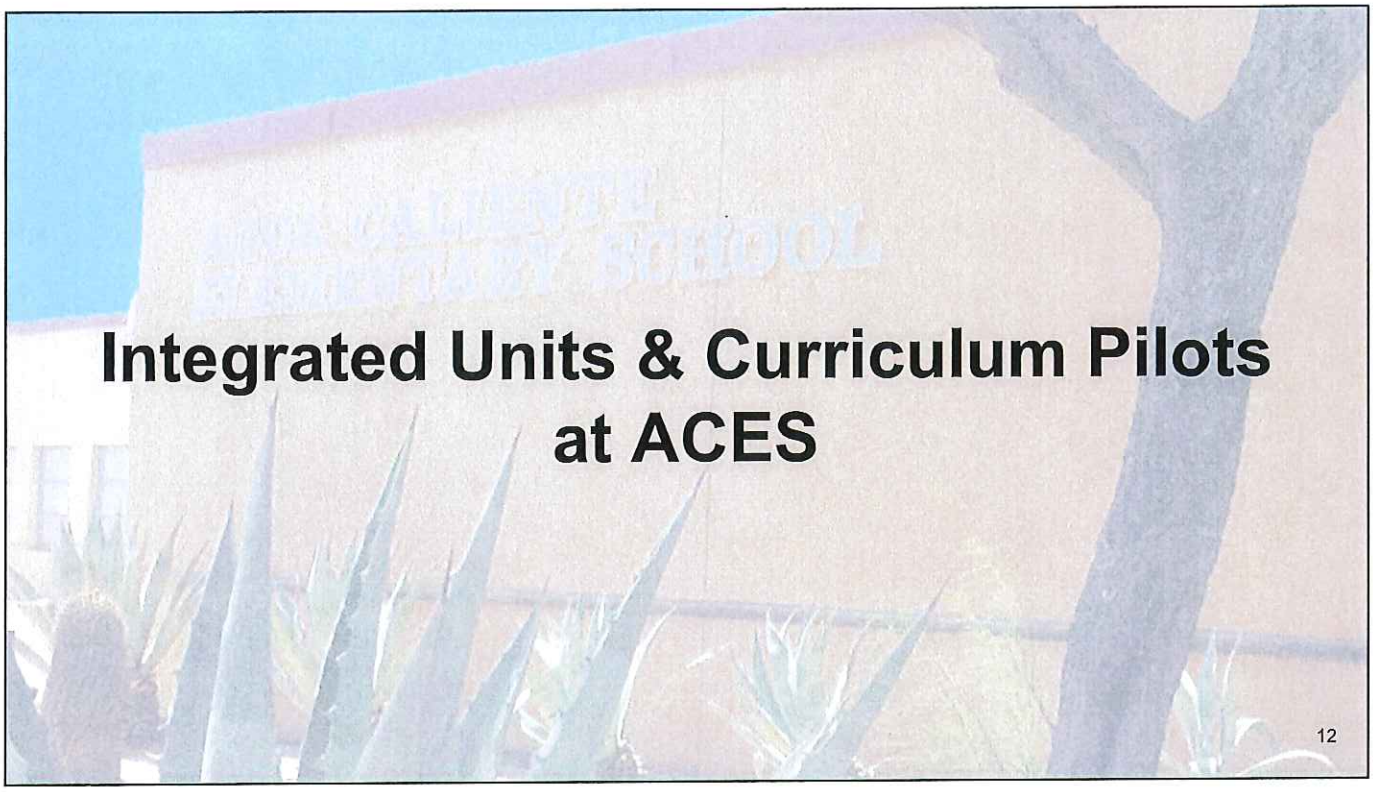
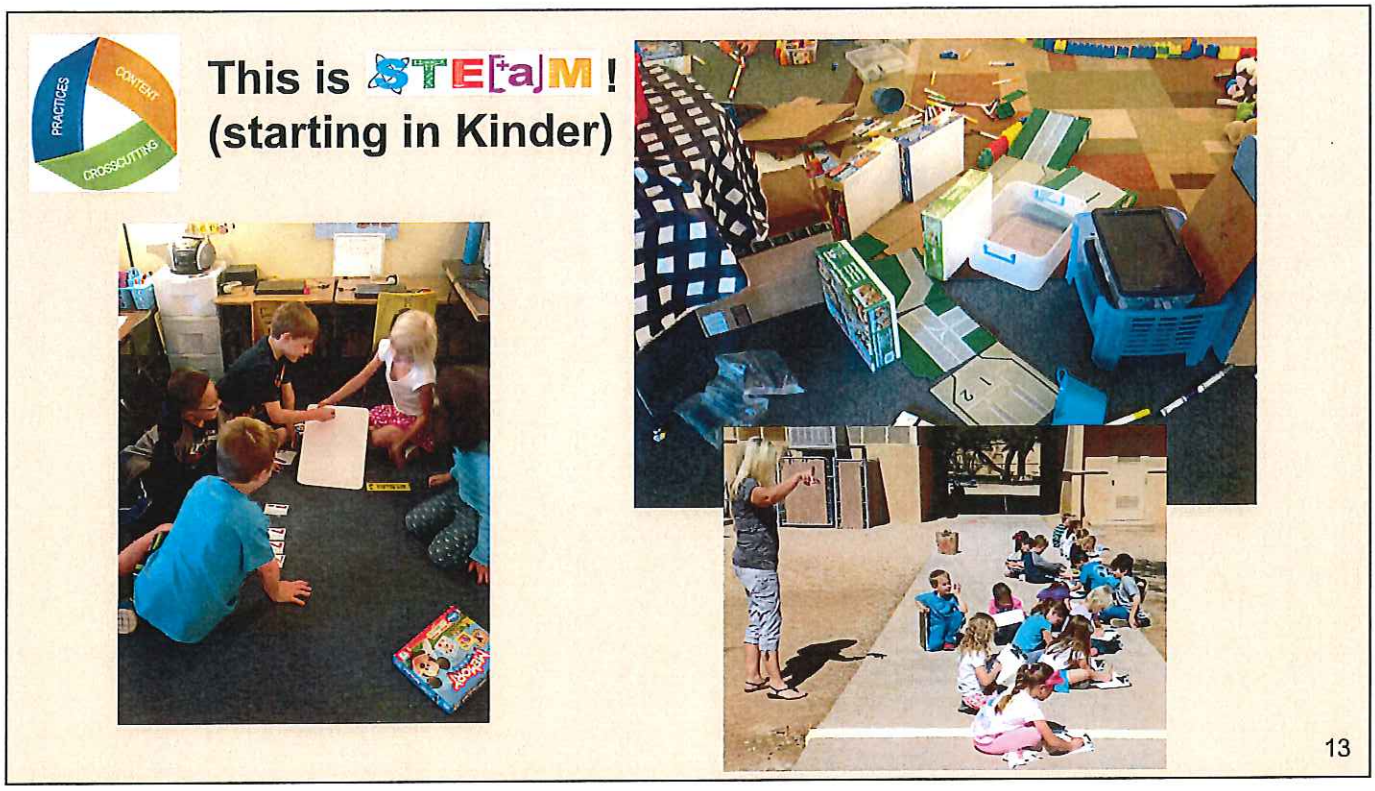
http://www.corestandards.org/wp-content/uploads/ELA_Standards.pdf

Again, something from ACCRS and Common Core that is quoted in the McTighe and Wiggins article - read quote - while the description in the ACCRS/CC goes on to highlight how just those E/LA areas can be combined, we, along with McTighe and Wiggins contend that this does not have to stop at E/LA, but you can truly integrate science, E/LA, math, technology, often times, many if not all of the core subject areas through a single rich task or project or unit of study focused on a topic that is current and relevant.


Integrated Units & Curriculum Pilots
at ACES
12



Last year Barbara (with a little help from Krista) develop a unit for Kinder on forces and motion. These are some images from the pilot, we have brought along the unit material for you to look at - this is the type of material that we will ultimately produce for all the units we help develop.

Key features of the upper elementary (4th-6th) Integrated Units & Curriculum

- **Interactive Notebooks**
- **Experience formulating questions**
- **Key variable identification**
- **Design appropriate experiments based on questions formulated**
- **Generate tables/graphs to help analyze data**
- **Scientific argumentation**
- **Write multiple scientific reports**
  - **Use Claims-Evidence-Reasoning (CER) framework**
  - **Peer-review process (5th & 6th)**

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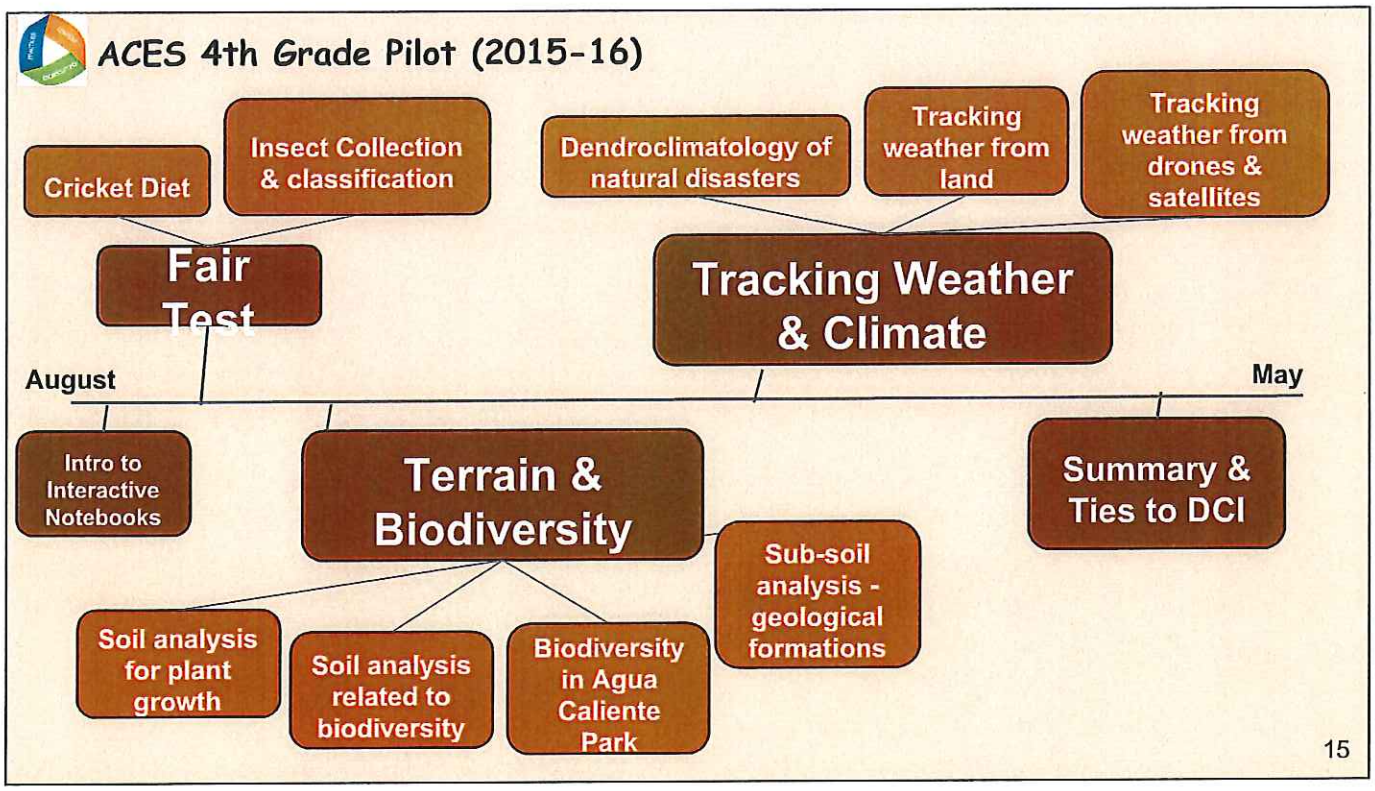
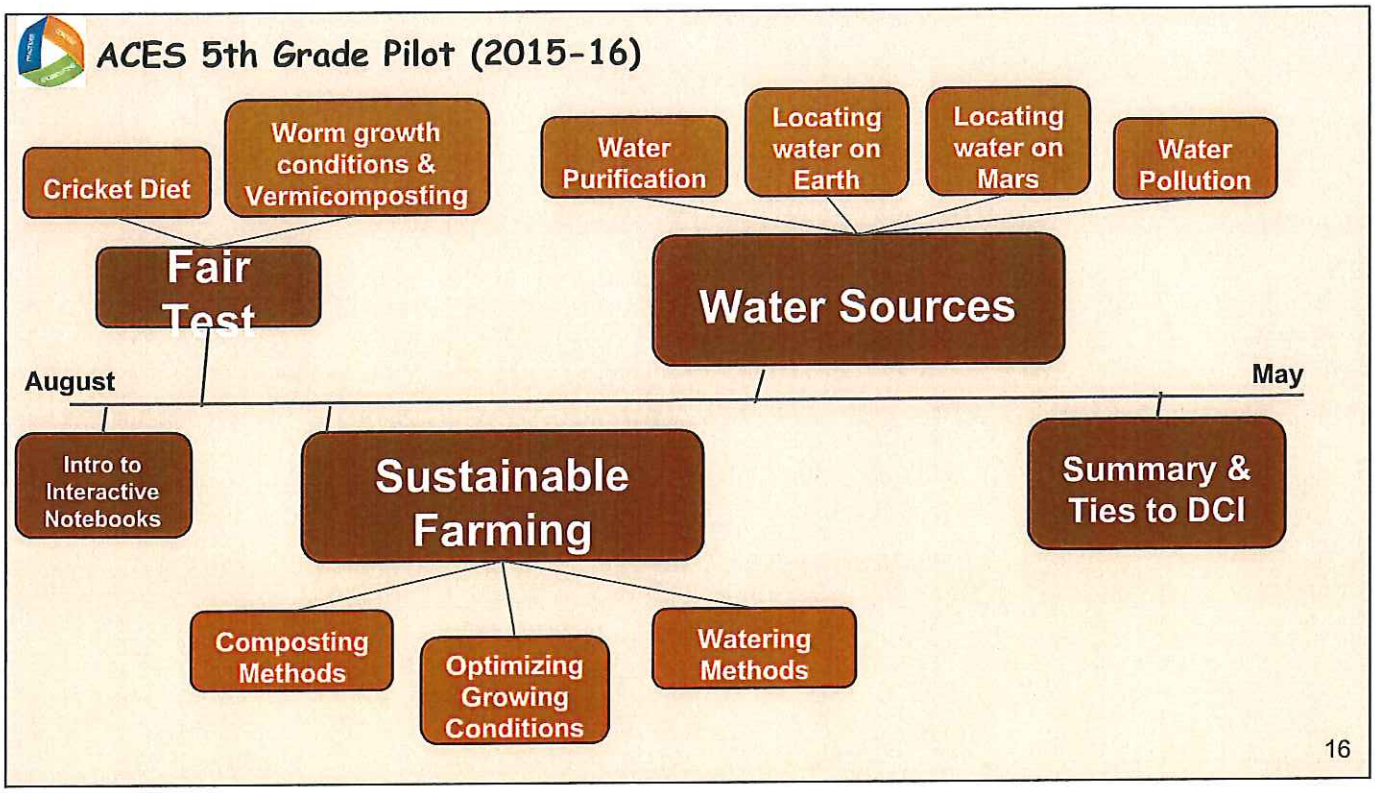
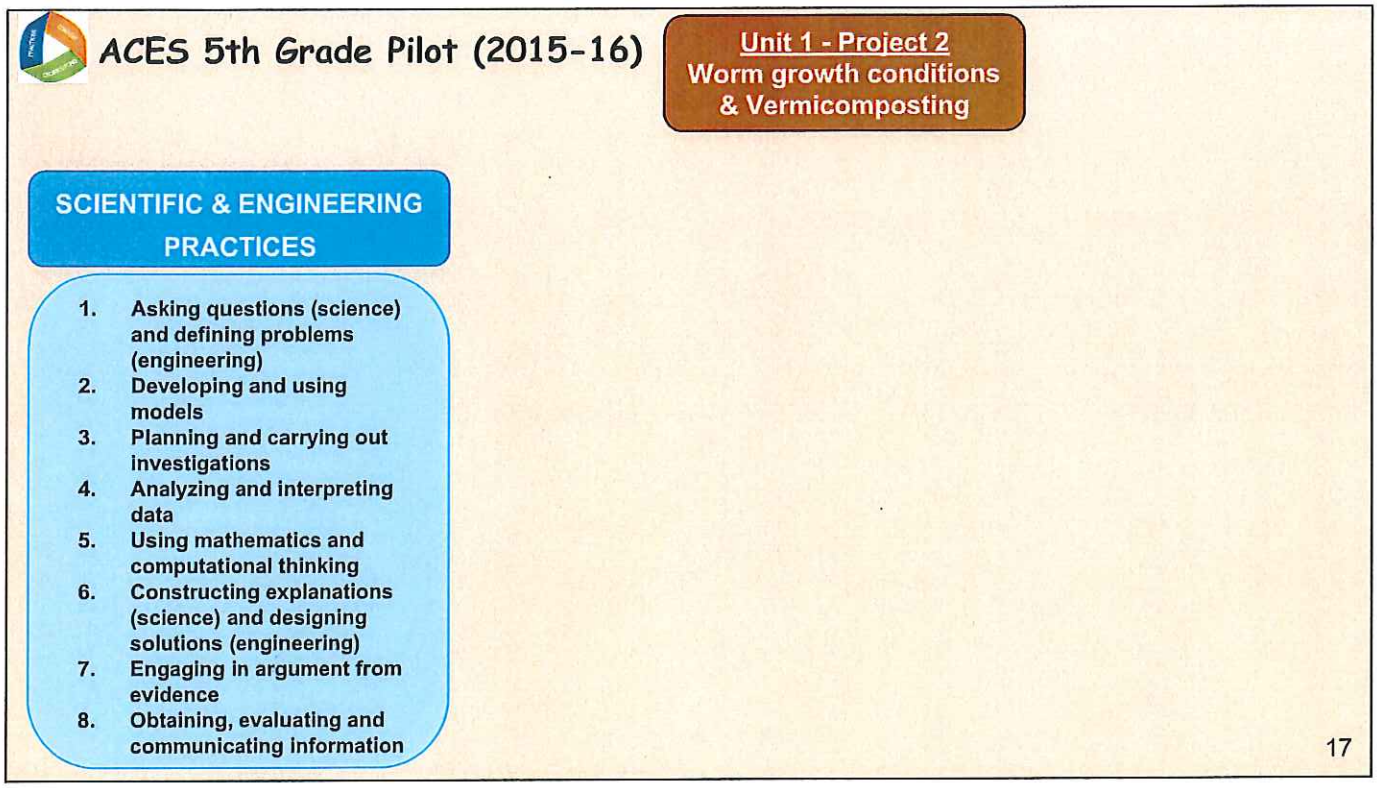
More detail in Handout p. 2



Outline of units for entire year. Note: these hit all the current AZ science standards. Ties to DCI at the end of the year is the time where we will purposely make ties between the units studies throughout the year to the key content call for in their science standards (Disciplinary Core Ideas). This could also be done for any other standards. This is a way to visibly show connections for the students and set the stage so that as they get older they could be the ones in charge of making sure the classes they take meet different standards.



Outline of units for entire year.
More detail in Handouts p.5-6



The following slides highlight the dimensions from the K-12 Framework for science education that are covered just in Unit 1 - Project 2 for the 5th grade integrated pilot. Important to note that while many of these are covered just within this unit, they will be revisited again and again throughout the year and throughout a student's career via these integrated units.

The writings in red outline the tasks students will be performing during the project that correspond with the highlighted Practice, Cross-cutting concept or Disciplinary Core Idea

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

SCIENTIFIC & ENGINEERING PRACTICES

1. Asking questions (science) and defining problems (engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (science) and designing solutions (engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating and communicating information

*Read article on challenge
*Annotate article
*Determine the goal(s)
*Identify key variables to formulate a question

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

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7. Engaging in argument from evidence
8. Obtaining, evaluating and communicating information

*Determine settings for control variables
*Write out procedure
*Collect data over predetermined period (3-6 mo.)

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

SCIENTIFIC & ENGINEERING PRACTICES

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8. Obtaining, evaluating and communicating information

*Graph population growth of worms over time

*Compare growth rates based on changes in independent variable

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

SCIENTIFIC & ENGINEERING PRACTICES

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8. Obtaining, evaluating and communicating information

*Determine optimal conditions for maximum worm population growth

* Write a report to inform vermicomposting at ACES

*Deliver report to Worm Farm

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

CROSS-CUTTING CONCEPTS

1. Patterns
2. Cause and effect: Mechanisms & Explanations
3. Scale, proportion, and quantity
4. Systems and system models
5. Energy and matter: Flows, cycles, and conservation
6. Structure and function
7. Stability & Change

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Identification of key factors that affect worm population growth

CROSS-CUTTING CONCEPTS

1. Patterns
2. Cause and effect: Mechanisms & Explanations
3. Scale, proportion, and quantity
4. Systems and system models
5. Energy and matter: Flows, cycles, and conservation
6. Structure and function
7. Stability & Change

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Monitor change over time in a system
*Introduced to non-linear relationships

CROSS-CUTTING CONCEPTS

1. Patterns
2. Cause and effect: Mechanisms & Explanations
3. Scale, proportion, and quantity
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5. Energy and matter: Flows, cycles, and conservation
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ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Energy flow from food matter to decomposers

CROSS-CUTTING CONCEPTS

1. Patterns
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3. Scale, proportion, and quantity
4. Systems and system models
5. Energy and matter: Flows, cycles, and conservation
6. Structure and function
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ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

DISCIPLINARY CORE IDEAS

1. Physical Sciences
2. Life Sciences
3. Earth and Space Sciences
4. Engineering, Technology, and Applications of Science

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ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

DISCIPLINARY CORE IDEAS

1. Physical Sciences
2. Life Sciences
3. Earth and Space Sciences
4. Engineering, Technology, and Applications of Science

*Structure & Properties of matter
-conservation of mass

*Chemical reactions
-decomposition

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PS1.A, PS1.B

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Interdependent relationships in an ecosystem

*Cycles of matter & energy transfer in an ecosystem

DISCIPLINARY CORE IDEAS

1. Physical Sciences
2. Life Sciences
3. Earth and Space Sciences
4. Engineering, Technology, and Applications of Science

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

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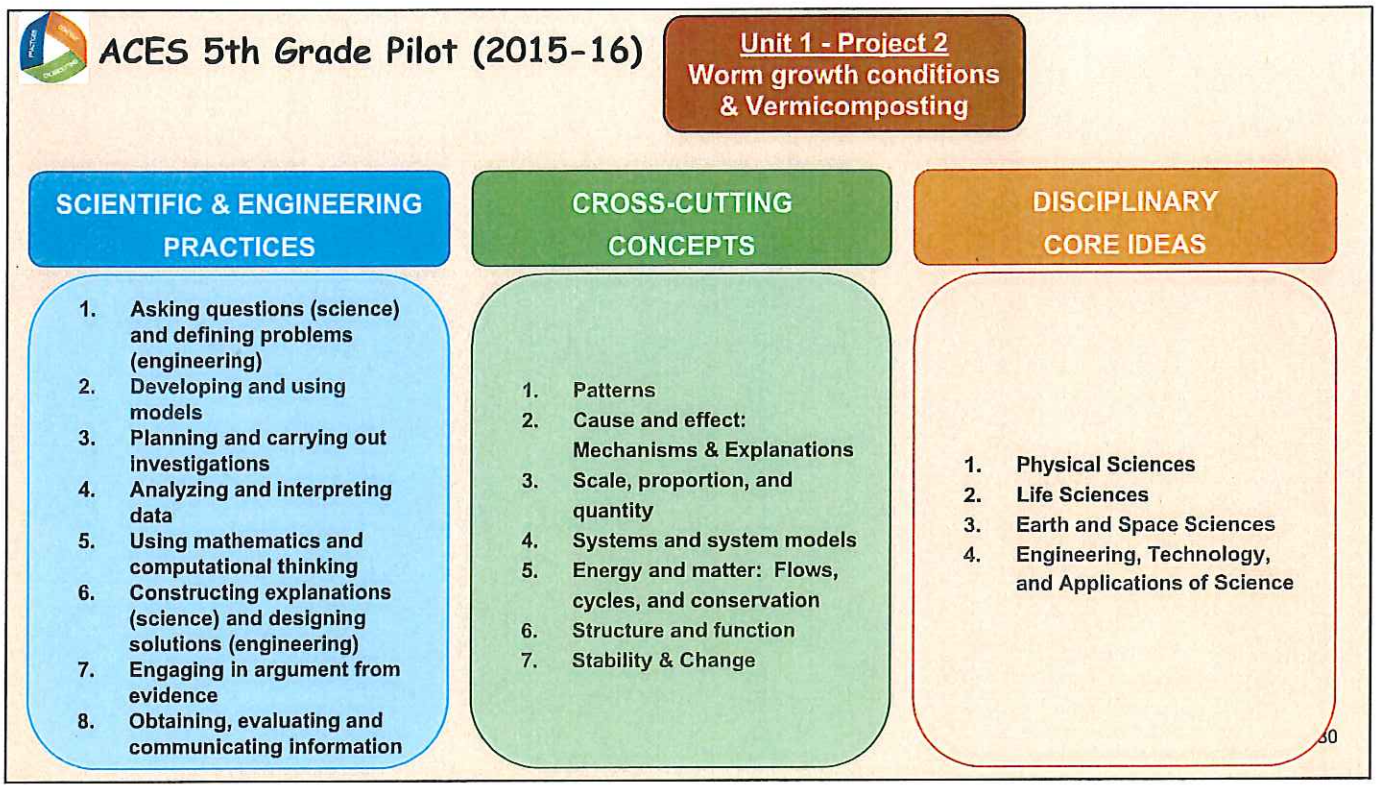


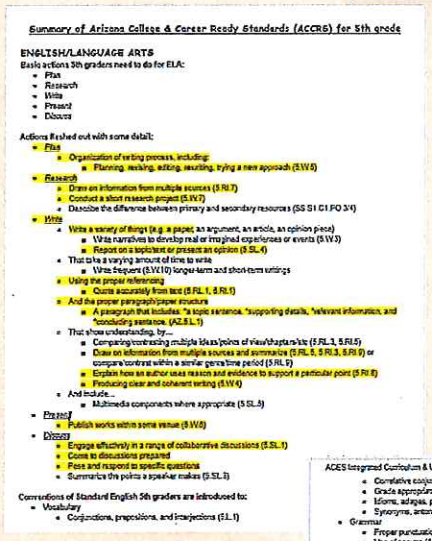
All the dimensions bolded here are what is covered just within this one Project for Unit 1.

This is a "single rich task" for sure!

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Covers roughly 50% of E/LA standards



Summary of Arizona College & Career Ready Standards (ACCRS) for 5th grade

ENGLISH/LANGUAGE ARTS

Basic actions 5th graders need to do for ELA:

- Plan
- Research
- Write
- Present
- Discuss

Actions fleshed out with some detail:

- Plan
  - Organization of writing process, including:
    - Planning, revising, editing, rewriting, trying a new approach (5.W.5)
- Research
  - Draw on information from multiple sources (5.RI.7)
  - Conduct a short research project (5.W.7)
  - Describe the difference between primary and secondary resources (SS.S1.C1.PO.3/4)
- Write
  - Write a variety of things (e.g. a paper, an argument, an article, an opinion piece)
    - Write narratives to develop real or imagined experiences or events (5.W.3)
    - Report on a topic/text or present an opinion (5.SL.4)
  - That take a varying amount of time to write
    - Write frequent (5.W.10) longer-term and short-term writings
  - Using the proper referencing
    - Quote accurately from text (5.RL.1, 5.RI.1)
  - And the proper paragraph/paper structure
    - A paragraph that includes: "a topic sentence, "supporting details, "relevant information, and "concluding sentence. (AZ.5.L.1)
  - That show understanding, by...
    - Comparing/contrasting multiple ideas/points of view/characters/etc (5.RL.3, 5.RI.5)
    - Draw on information from multiple sources and summarize (5.RL.9, 5.RI.3, 5.RI.9) or compare/contrast within a similar genre/time period (5.RL.5)
    - Explain how an author uses reason and evidence to support a particular point (5.RI.8)
    - Producing clear and coherent writing (5.W.4)
  - And include...
    - Multimedia components where appropriate (5.SL.5)
- Present
  - Publish works within some venue (5.W.6)
- Discuss
  - Engage effectively in a range of collaborative discussions (5.SL.1)
  - Come to discussions prepared
  - Pose and respond to specific questions
  - Summarize the points a speaker makes (5.SL.3)

Conventions of Standard English 5th graders are introduced to:

- Vocabulary
  - Conjunctions, prepositions, and interjections (5.L.1)

Handouts pages 3-4

ACES Integrated Curriculum & Units — Young, Drummond, Anderson

- Correlative conjunctions (5.L.1)
- Grade appropriate words (5.L.2) (GET A LIST?)
- Idioms, adages, proverbs (5.L.3)
- Synonyms, antonyms, homographs (5.L.5)
- Grammar
  - Proper punctuation (5.L.2)
  - Use of comma (5.L.2)
    - Separate yes/no (e.g. Yes, thank you)
    - Set off a tag question (It's true, isn't it?)
    - Indicate direct address (Is that you, Steve?)
  - Proper verb tense (5.L.1)
  - Use common Grade-appropriate Greek and Latin affixes and roots as clues (5.L.4)

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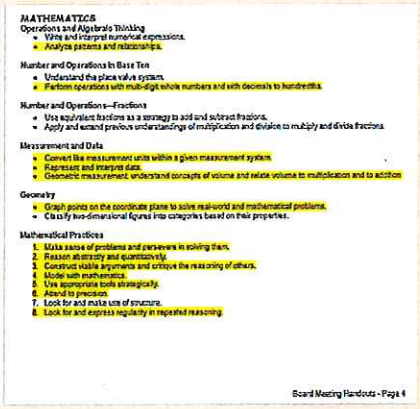
This project also covers roughly half of the E/LA standards for the entire year. Again, not a one and done, but a revisiting throughout the year.

ACES 5th Grade Pilot (2015-16)

Unit 1 - Project 2
Worm growth conditions & Vermicomposting

*Covers roughly 60% of Math standards



MATHEMATICS

Operations and Algebraic Thinking
- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Number and Operations in Base Ten
- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations—Fractions
- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data
- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Geometry
- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

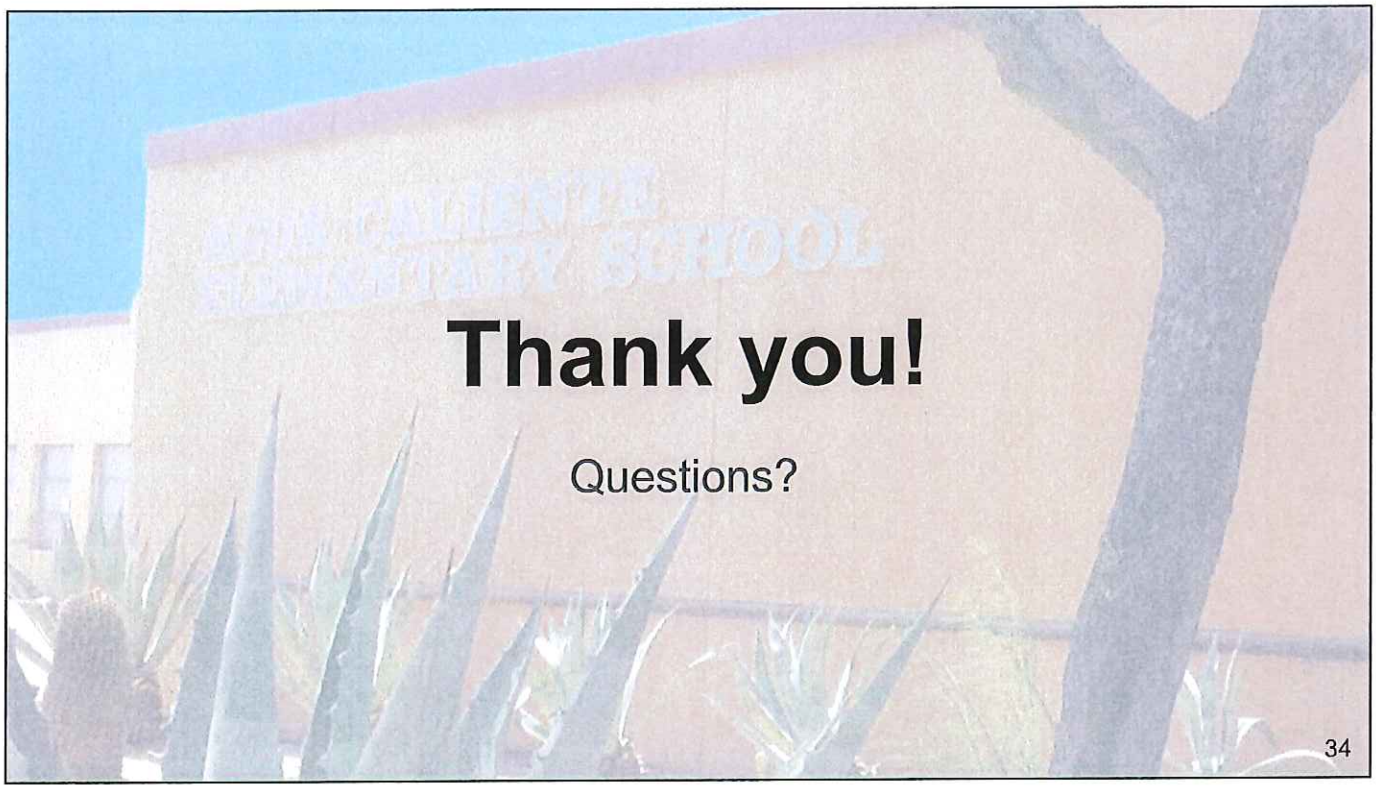
Board Meeting Handouts - Page 4

Handout page 4

Same for math.

A path forward...

- Fold into the current curriculum project next year
  - These units are filling the gaps
  - Capstone - 21st century skills, ACCRS, future of science standards
  - Fully develop curriculum
- Grassroots
  - Include all 5th grade next year
  - 6th grade next year



Happy to answer any questions and would be happy to come back and report on the progress later on in the school year.