Washington Central Unified Union School District

WCUUSD exists to nurture and inspire in all students the passion, creativity and power to contribute to their local and global communities.

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Bryan Olkowski
Superintendent

Berlin East Montpelier Calais
U- 32
Middlesex Worcester

WCUUSD Quality Committee
Meeting Agenda
4.7.21 5:00 - 6:00 pm
https://tinyurl.com/39kse4kf
Via Video Conference*
Meeting ID: 815 9851 1405
Password: 385296
Dial by Your Location: 1-929-205-6099

1. Call to Order

2. Approve Minutes of 3.3.21

3. Reflection on Last Month's Review (Literacy Student Learning Outcomes)

4. Discussion – Presentation of WCUUSD Science Student Learning Outcomes
   4.1. Making Meaning Protocol
   - What do you see?
   - What questions does this presentation raise for you?
   - What strikes you as significant?
   - What are the implications for our work?

   4.2. Going Forward
   - How will we share this work with the full board?
   - What worked about this process?
   - What might we change for next month's SLO presentation?

5. Future Agenda Items
   5.1. Co-Curricular and Advanced Placement

6. Adjourn

***Open Meeting Law temporary changes as of 3/30/20:**

Boards are not required to designate a physical meeting location. Board members and staff are not required to be present at a designated meeting location.

Our building will not be open for meetings. All are welcome to attend virtually.

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WCUUSD Quality Committee
Meeting Minutes Unapproved
3.3.21 5:00 - 6:00 pm

Present: Stephen Looke, Jen Miller-Arsenault, Lindy Johnson, Kari Bradley, Anna Farber, Jim Garrity, Scott Thompson, Bryan Olkowski, Jill Olson, Kelly Bushey, Diane Nichols-Fleming, Cindy& Mack Gardner-Morse

1. **Call to Orde**r: **Kari Bradley called the meeting to order at 5:02 p.m.**

2. **Approve Minutes of 2.3.21: Lindy Johnson moved to approve the minutes of Feb 3, 2021. Seconded by Scott Thompson. This motion carried unanimously**

3. **Reflection on Last Month's Review (Mathematical Content and Practices):**
   Lindy: People seemed to enjoy the videos of children demonstrating math skills.
   Kari: Seemed to have a robust conversation/ discussion.
   Diane: People understand math, it's easier to talk about than the previous topic - appreciates the message that we are all mathematicians.

4. **Discussion – Presentation of WCUUSD Literacy Student Learning Outcomes:**
   Jennifer Miller-Arsenault shared a slideshow presentation to the committee: *WCUUSD Literacy Student Learning Outcomes*. She had provided an opportunity for committee members to interact with the Jam board to answer the making meaning protocol questions.

   4.1. Making Meaning Protocol:
   - What do you see?
   - What questions does this presentation raise for you?
   - What strikes you as significant?
   - What are the implications for our work?

   Jill: The format of the presentation tonight was helpful and easier to understand the analysis that Jen had provided of the data. **Diane**: An hour for this committee feels fairly rushed. How does this committee get at the hard questions - where are the gaps? What are we missing? How can we support? **Lindy**: Feels that Slide #13 is a good, concise resource for the full board. **Anna**: Appreciated the photos and visual representations. It is interesting to see ACT scores but hard to interpret as they are one whole sum.

Stephen: The full board should get an executive summary; the committee can have a more in depth discussion of the data. **Kari**: The format of the presentation worked well; Jam board might work better if we were asked to participate earlier so that we can consider each other's input to support the conversation. Might help to have some verbal responses/ reporting. The key part is getting to the implications/ how it applies to strategic planning. How do we answer some of the questions that arise during discussion?

4.2. Going Forward:

- How will we share this work with the full board?
- What worked about this process?
- What might we change for next month's SLO presentation?

Anna: The visual that shows both 19-20 and 20-21 is helpful. **Jill**: We keep trying to do one huge topic per session - maybe we need to take several sessions to consider a topic. There is a lot of ground to cover in an hour. Liked using the Jam board interactively. **Lindy:** Because we have invested in the curriculum review, we need to keep putting it out there that we are awaiting the results to inform our work going forward. **Jill**: When can we expect the curriculum review? (Jen Miller-Arsenault - expecting around mid-May.) **Kari:** What is that we think are priorities that *have to* go into strategic planning? **Kari:** Seems appropriate for this committee to take a look at the curriculum review document and do some analysis to share with the full board. **Anna:** Why do we use Star 360? **Jen Miller-Arsenault**: This is a quick, universal screener that is (at least partially) aligned with our student expectations - allows us to see generally how we are doing, and whether there are some students who we might want to take a closer look at (e.g. using Read 180 assessment). Bryan Olkowski spoke about different ways to incentivize students taking these assessments (e.g. Star 360) seriously.

5. Future Agenda Items

- Next month: Science
- May: Physical Education and Health
- June: Post-secondary outcomes
- Co-Curricular and Advanced Placement

6. Adjourn: The committee adjourned at 5:55 p.m.

Respectfully submitted,
Lisa Stoudt, Committee Recording Secretary

What did you see?

We appear to have good structure/inputs: standards, Performance Indicators, 90 minutes per day elementary instruction

Even during a pandemic, students are succeeding and are able to demonstrate learning

Significant challenges for kids on IEP

Achievement data good relative to our math and state literacy

The Chronicle is impressive at times, well written and informative

What questions did this presentation raise for you?

Does literacy proficiency keep many students from graduating?

What are the options for providing different instruction for those who need it?

Are there any districts that have reduced the gap between FRL and not to learn from?

Do we have data on what the HIGHEST performing schools look like - so we can compare ourselves to a high benchmark instead of an average?

Are there actions we could take when students are younger that would allow for more growth later?

Is the Star 360 our only way to see kids growth?

What impact does parenting have in literacy achievement?•

What struck you as significant?

Generally better achievement data than math, better than state average, still not where we want it to be

Students can learn even outside of a classroom and achieve positive feedback

Interesting to see "difference in the difference" between FRL/non and IEP/non

What are the implications for our work?

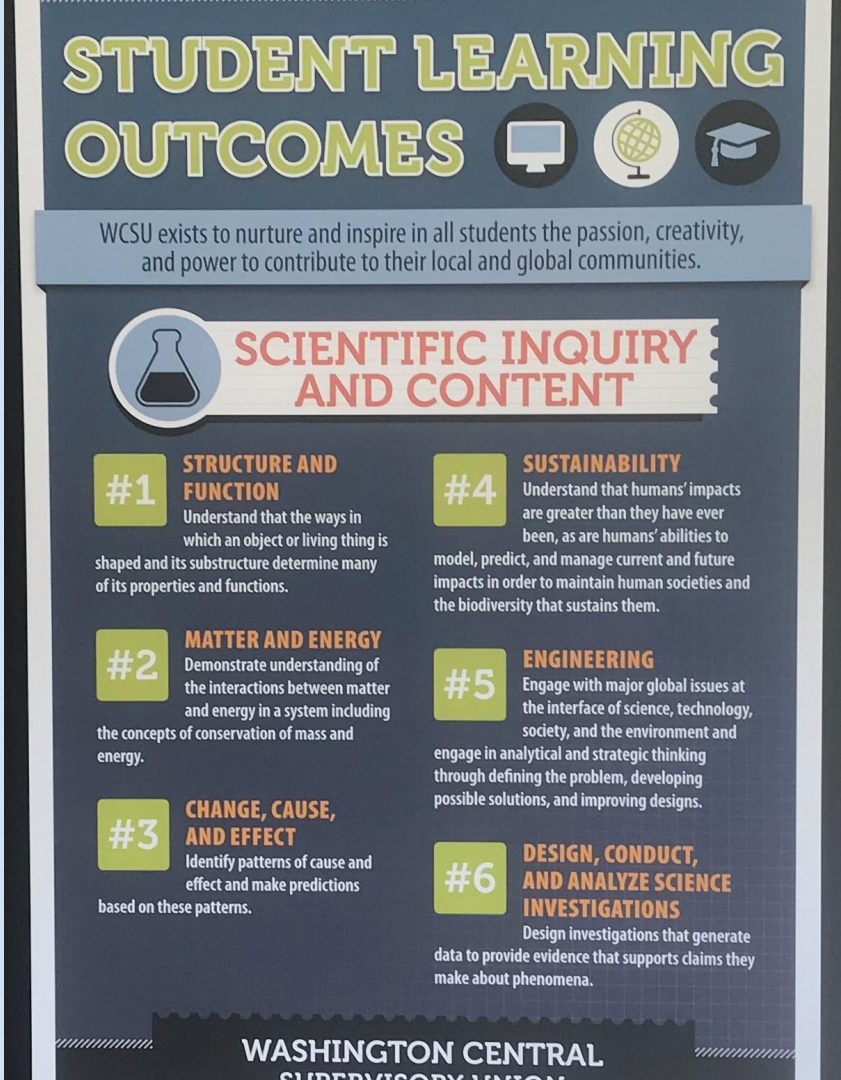
Understanding differences in literacy and math achievement could help us in strategic planning•

Can we identify strategic priorities that could allow us to make gains in both literacy and math over the next five years?

Consider whether the curriculum review supports Jen's thinking around needing to relook at writing assessment

WCUUSD Scientific Inquiry and Content SLO

Education Quality Committee
April 7, 2021



Modified Making Meaning Protocol

As you enjoy this presentation, consider:

- What do you see?
- What questions does this presentation raise for you?
- What strikes you as significant?
- What are the implications for our work?

Feel free to post in the Jamboard before and during the presentation.

SRI SCHOOL REFORM INITIATIVE
A COMMUNITY OF LEARNERS

Curriculum: Standards and Performance Indicators*

Aligned to Next Generation Science Standards

1. **Engineering**: Engage in an iterative cycle of design to develop solutions to human problems.
2. **Scientific Practices**: Design investigations that generate data to provide evidence that supports claims they make about phenomena.
3. **Science Concepts:** Make connections showing how the concepts of matter and energy; change, cause, and effect; and structure and function can be observed across the science domains.

*Revised August 2020

SCIENTIFIC INQUIRY AND KNOWLEDGE	
PBGR	
Standard 1: Structure and Function	
	Understand that the ways in which an object or living thing is shaped and its substructure determine many of its properties and functions.
	Performance Indicators:
a.	Molecules, Food, Body: Make connections between molecules found in the food we eat and how they are rearranged to function within the human body.
b.	Cell Structure and Function: Make connections between cellular structures and processes and their impact on the function of a cell in maintaining the homeostasis of an organism.
c.	Cellular Division and Genetics: Apply understanding of how differences in the structure of DNA relate to expressed traits in organisms and create variation within a population.
d.	Elements: Apply understanding of the structure of an atom to how altering the substructure changes its properties.
e.	Chemical and Physical Properties: Apply understanding of chemical models to show how chemical and physical properties of materials depend on the structure and arrangement of their specific subcomponents and forces between them.
Standard 2: Matter and Energy	
	Demonstrate understanding of the interactions between matter and energy in a system including the concepts of conservation of mass and energy.
	Performance Indicators:

Next Generation Science Standards (NGSS)*

- Scientific Practices
  - E.g., Asking questions and defining problems, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking
- Crosscutting Concepts
  - E.g., Patterns, cause and effect, systems and system models, energy and matter, structure and function, stability and change
- Disciplinary Core Ideas
  - E.g., Structure and properties of matter, chemical reactions, nuclear processes, forces and motion, types of interactions, definitions of energy, conservation of energy and energy transfer

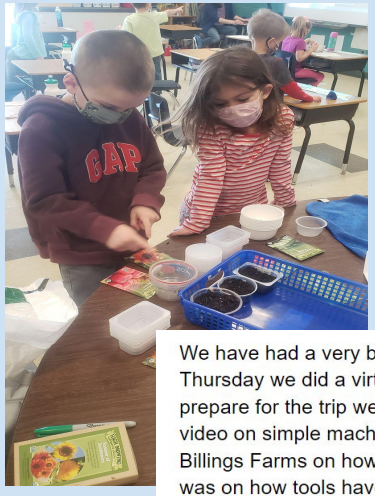
*NGSS adopted by VT AOE in 2013

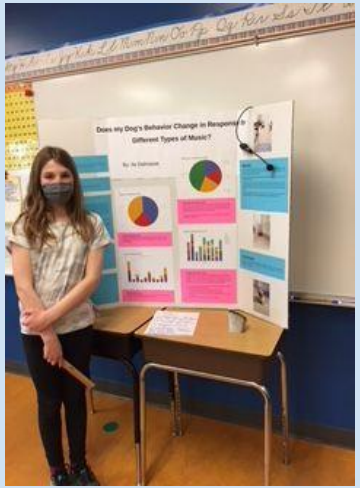
Instruction: Elementary School Examples

- Marble shoot video 1 (11 seconds)
- Marble shoot video 2 (7 seconds)
- Marble shoot video 3 (7 seconds)

Instruction: Elementary School Examples

Grade 5 examples and photos





We have had a very busy week here Grade 5. On Thursday we did a virtual field trip with Billings Farm. To prepare for the trip we saw a Bill Nye the Science Guy video on simple machines and watched a video from Billings Farms on how to move a gourd. The field trip was on how tools have changed over time and the simple machines in a tool. We saw artifacts from maple taps or spiles, and hand drills to seed spreaders or broadcasters. Then students designed their own invention.

The photos you see are from Friday's PBIS/Science celebration. Applying what students had learned about simple machines this week, they were tasked with creating a Rube Goldberg machine to move a ball from one cup on their desk, using all simple machines they could design, to a final cup on the floor. You can ask your child to explain their machine to you.

Instruction: Middle School Examples

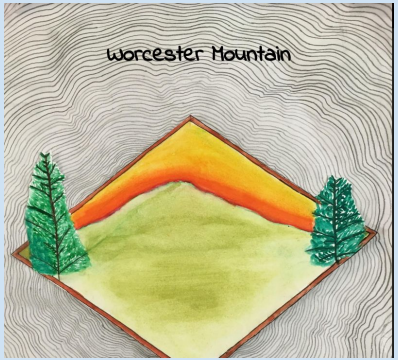
- A Hiker's Guide to Stowe Pinnacle
- Hunger Mountain: A Steward's View of the Mountain Ecosystem

Evaluator Name: _____ Evaluator Feedback Form

Background and Possible Questions to Ask:

- Students were given approximately 30 topics to choose from for their Guidebook Contribution. The topics fell into one of the following categories: History, Mapping, Stewardship and Human Impact, Nature Writing, and Science Investigation Results.
- After choosing their topic students were put in mixed groups - topics were mixed so that there would be a variety on each page. The groups were given the task to design and format their 2 guidebook pages in a way that is visually appealing and informative. Students were required to work as a team to decide who would contribute which piece to the guidebook. In a sense each team created their own 3 page "mini- guidebook" which are combined to create the class guidebook.
- All students also completed a Scientific Investigation of the Stowe Pinnacle ecosystem.
- Students will present to you a part of their scientific investigation and their contribution to the guidebook.
- All students also completed a Data Analysis and should be able to answer the Science and Math questions (you can ask them to reference their Data Analysis docs and/or have them show you).

Guidebook Section	Possible Questions about that Section
Mapping	• How did you determine the places that would be good to visit and those that should be avoided? • What does your map show? Why did you choose to set it up this way? • How did you create your map and what does it show about the Mountain? (if chose a map) • Why did you choose to represent the landscape in this way?
Stewardship	• What steps should visitors to Stowe Pinnacle take so they have a positive impact on the land? • How are trails maintained? • What are the effects of frequent use on the trail?
Scientific Investigation	• What was your testable question? • Why did you choose to include this data? • What does your data (table and graph) say about the result to your testable question? • Is your data reliable? • What would you change and/or keep the same about your procedure for collecting data? Why?



Instruction: High School Examples

Ecological Sampling for Forest Biodiversity using Transect Lines

Introduction

A transect is a line, laid on the forest floor, that is used to make sure the points or plots are distributed evenly throughout the forest stand. The length of the transect is specified, and usually measured with a tape. A compass bearing is often used to allow the transects to be parallel with one another. Points are marked at regular intervals along the transect and measurements are taken. If plots are used, whether circular or square, they are marked out at intervals along a transect.

Sampling should be distributed throughout the forest stand. Transects should be parallel to one another, which can be accomplished by following a compass bearing. The starting points for each transect would be selected randomly, for example, by throwing a branch over one's shoulder. Measurements could then be taken at specific intervals along each transect.

Directions

1. Transects will be 10 meters (m) long, determined by a pre-cut 10m length of rope.
2. Transects will run parallel to one another as determined by a compass bearing.
3. Flagging, marked by group members' initials, will be placed at the starting and endpoints of the transect, in order to return to the same location.

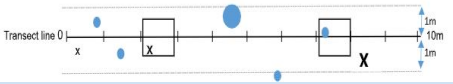
Overstory Sampling

The overstory includes the trees that form the upper layers within the forest. Some ways to record data about the overstory include measuring canopy cover, tree density, tree height, tree area, and snag density.

Methods:

Along the length of the transect line, for 1m on both sides, you will record the species, location and DBH (diameter at breast height) of each tree that is greater than 3 inches diameter and more than 50% within the transect.

Example:



Instruction: High School Examples

U-32 Forest Abiotic Factors
Abiotic Indicators Assessment

Field Sheet

Group Members:	Date:	Time:

Soil Temperature

1. Place the soil temperature probe in the middle of one of the 1m² plots for 5 minutes and then record the temperature.
2. Repeat for two other places within the plot, for a total of 3 readings.
3. Repeat Steps 1 & 2 for the other 1m² plot.

Moisture, Light and pH

1. Using the same locations where you measured soil temperature, place the 3-in-1 Plant Meter 3 inches into the soil in one of the 1m² plots.
2. Make sure the switch is on Moist and record the moisture level (1-10).
3. Change the switch to Light and measure the light level (0-2000).
4. Change the switch to pH and record the pH level (3.5 – 8)
5. Repeat steps 1-4 for two other locations in the plot.
6. Repeat steps 1-5 for the other 1m² plot.

Soil Samples:

1. At the same locations where you measured soil temperature, moisture, light and pH, dig about 3 inches into the soil of one of the 1m² plots.
2. Fill a baggie with soil from the three locations in that plot.
3. Repeat steps 1-2 for the other 1m² plot.
4. Bring the soil samples back to the classroom.

Human Impacts on Biodiversity Scenario

Purpose: This scenario is designed to address the choices made by different stakeholders in the context of a controversial issue. During this scenario you will be asked to analyze a situation from different stakeholders' points of view, make a fact-based decision about a proposal, and support your decision with evidence. Oftentimes, no right or wrong answer exists; you will have to simply select a choice to the best of your ability while analyzing the issue from different perspectives.

Assessment: Here is how you will be assessed on this project

SC4: Sustainability

	1	2	3	4
Use quantitative and qualitative data to create an evidence-based explanation to show how human activity impacts ecosystems, earth systems, or society.	I can identify types of human activity that impact ecosystems or earth systems..	I can describe how different types of human activity impact ecosystems.	I can use quantitative and qualitative data to create an evidence-based explanation to show how human activity impacts ecosystems.	I can use scientific data/ evidence and knowledge of ecosystems and earth systems, to make predictions about future changes on the system.

SC6: Science Investigations

Analyze Investigations	1	2	3	4
Develop conclusions based on data, describe possible flaws in data and identify errors in the investigation.	I can make a claim.	I can make multiple claims and am beginning to be able to back them up with data.	I can make multiple claims and support each with the appropriate data.	I can make complex claims that may not be obvious and support them with data.

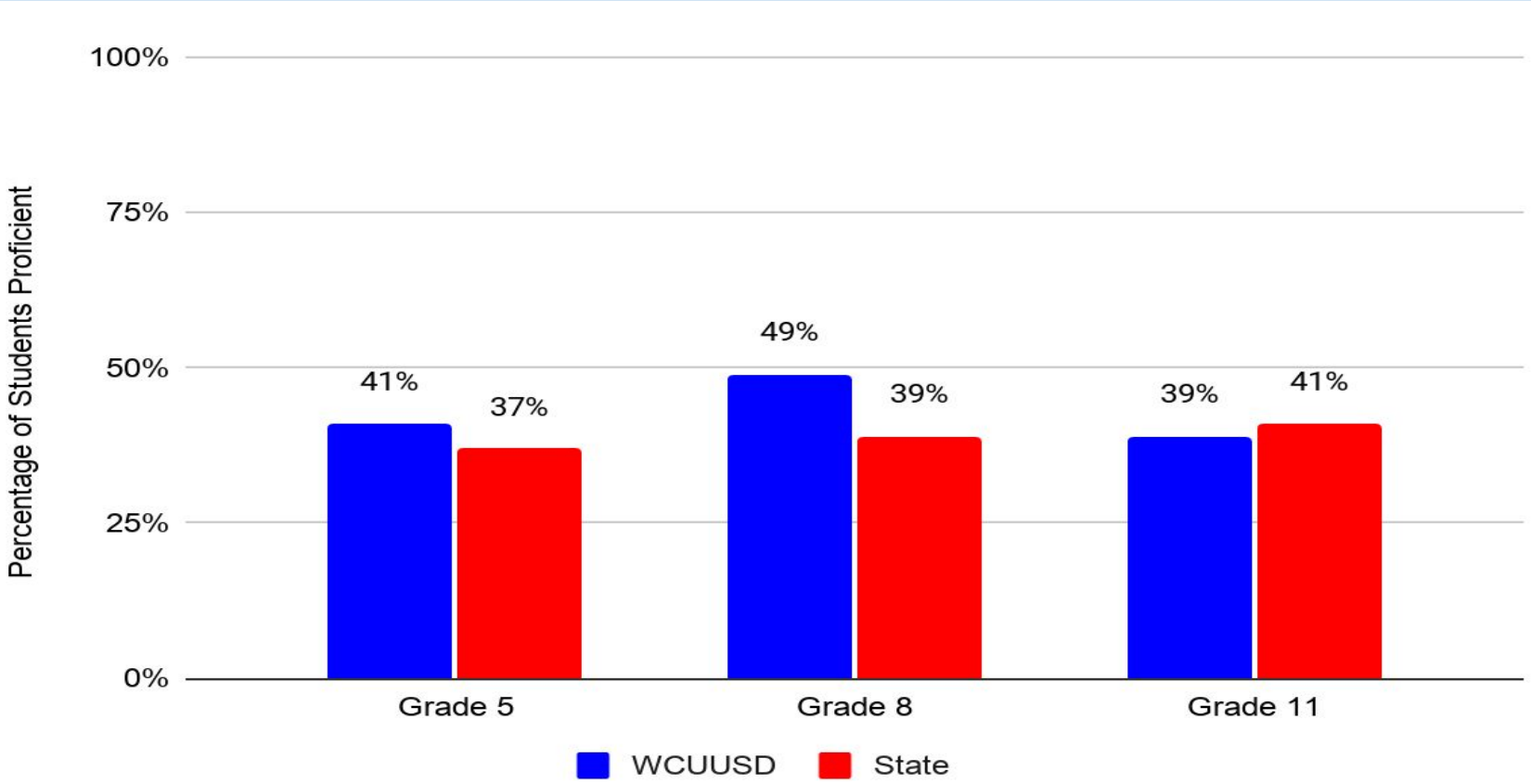
Vermont Science Assessment (VTSA)

- Fully aligned with Next Generation Science Standards
- Replaced New England Common Assessment Program (NECAP)
- Field-tested in May 2018
- First and only administration so far in May 2019
- Administered to students in Grades 5, 8, and 11
- Administered via computer
- Interface and accommodations similar to SBAC
- Approximately 2 hours long

Analysis of Data

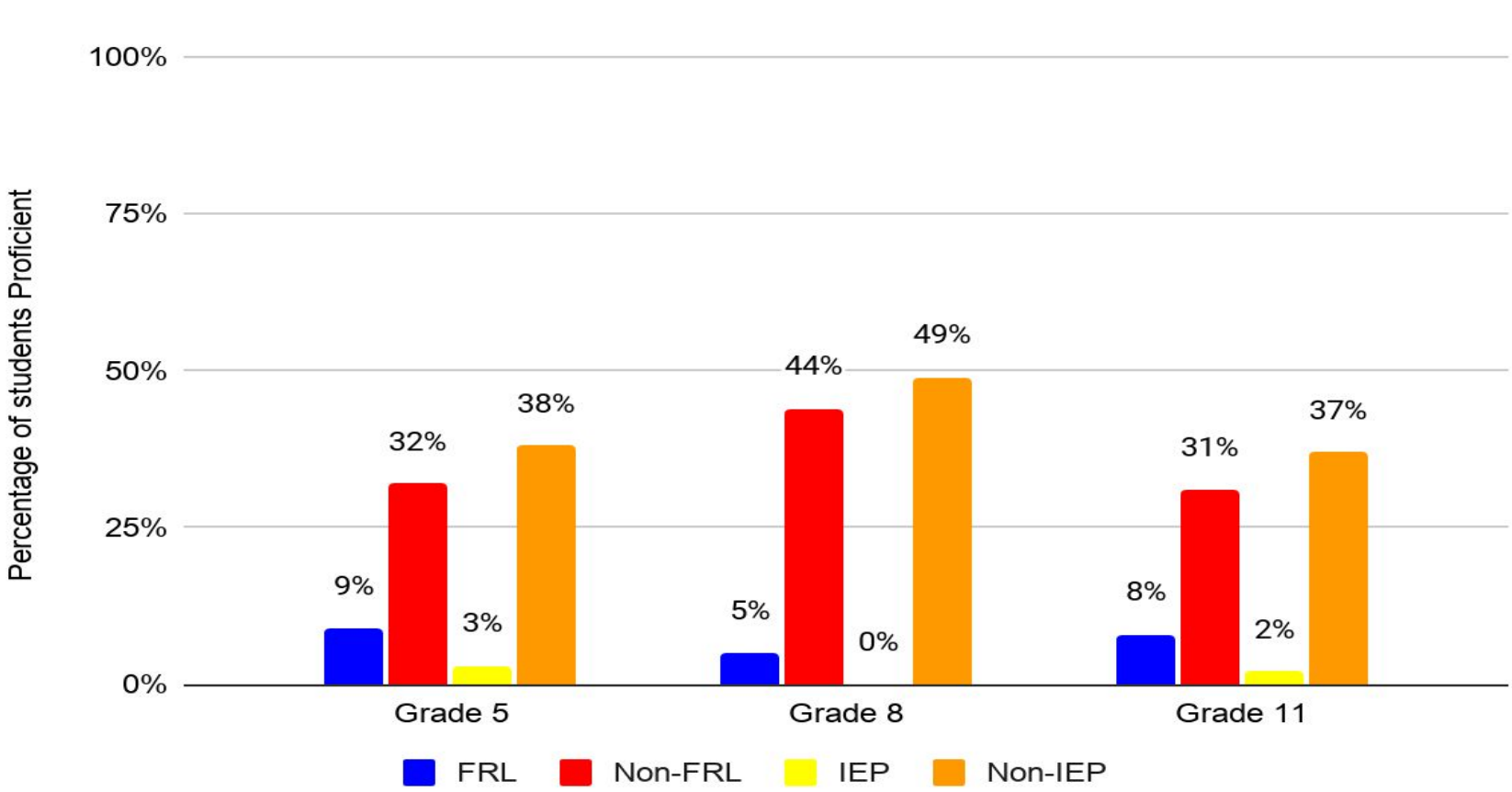
- We have fewer sources of data to analyze regarding our students' performance in science.
- The results on the VTSA indicate significant differences in performance between student sub-groups related to free and reduced lunch and individualized education plans.
- The ways in which we configure grade levels impacts our practices in science.
- It is hard to do an apples-to-apples comparison of student performance between last year and this year given the changes to the standards.

Assessment Data: VTSA WCUUSD Compared to VT, 2018-19



WCUUSD VTSA Results, Spring 2019

Disaggregated by FRL/non-FRL and IEP/non-IEP

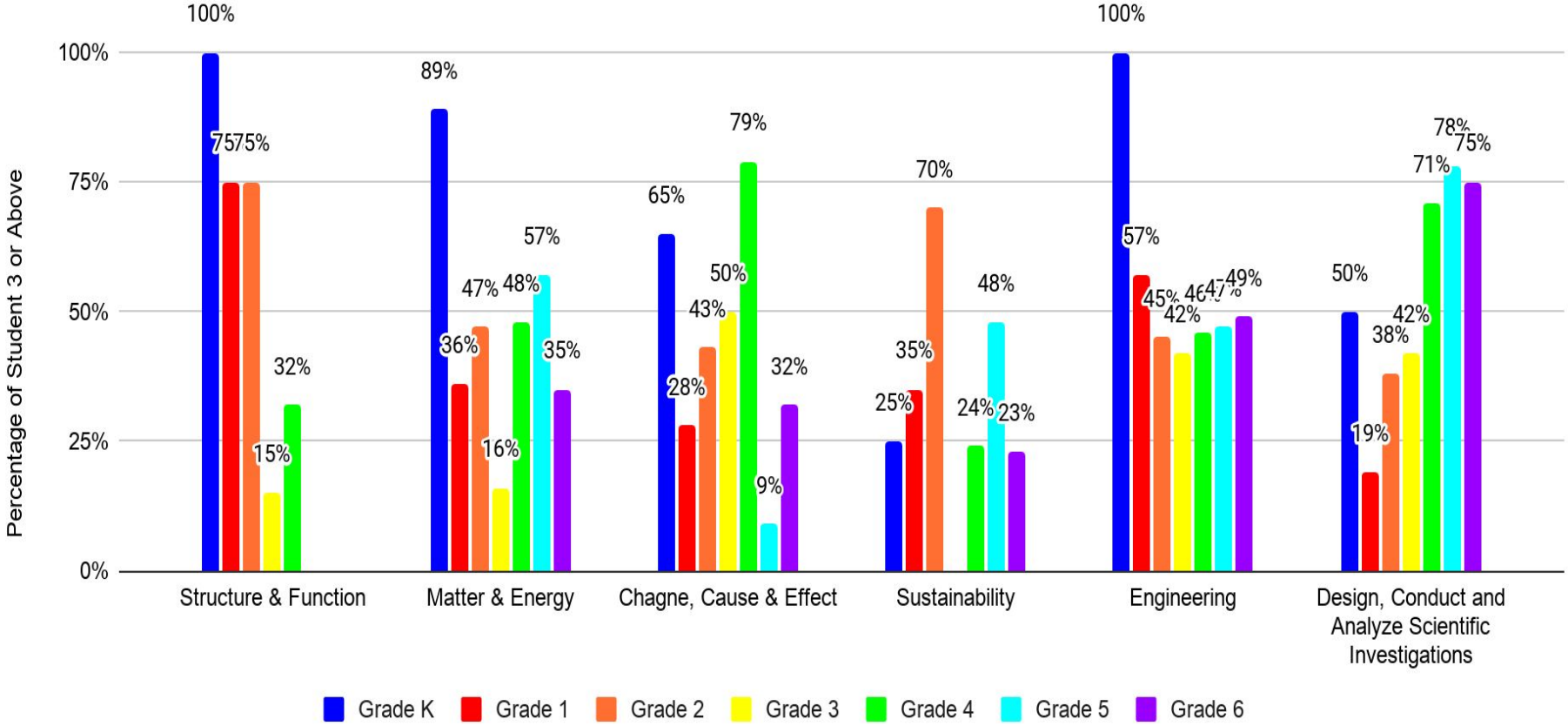


Assessment Data:
ACT
U-32 Compared to VT

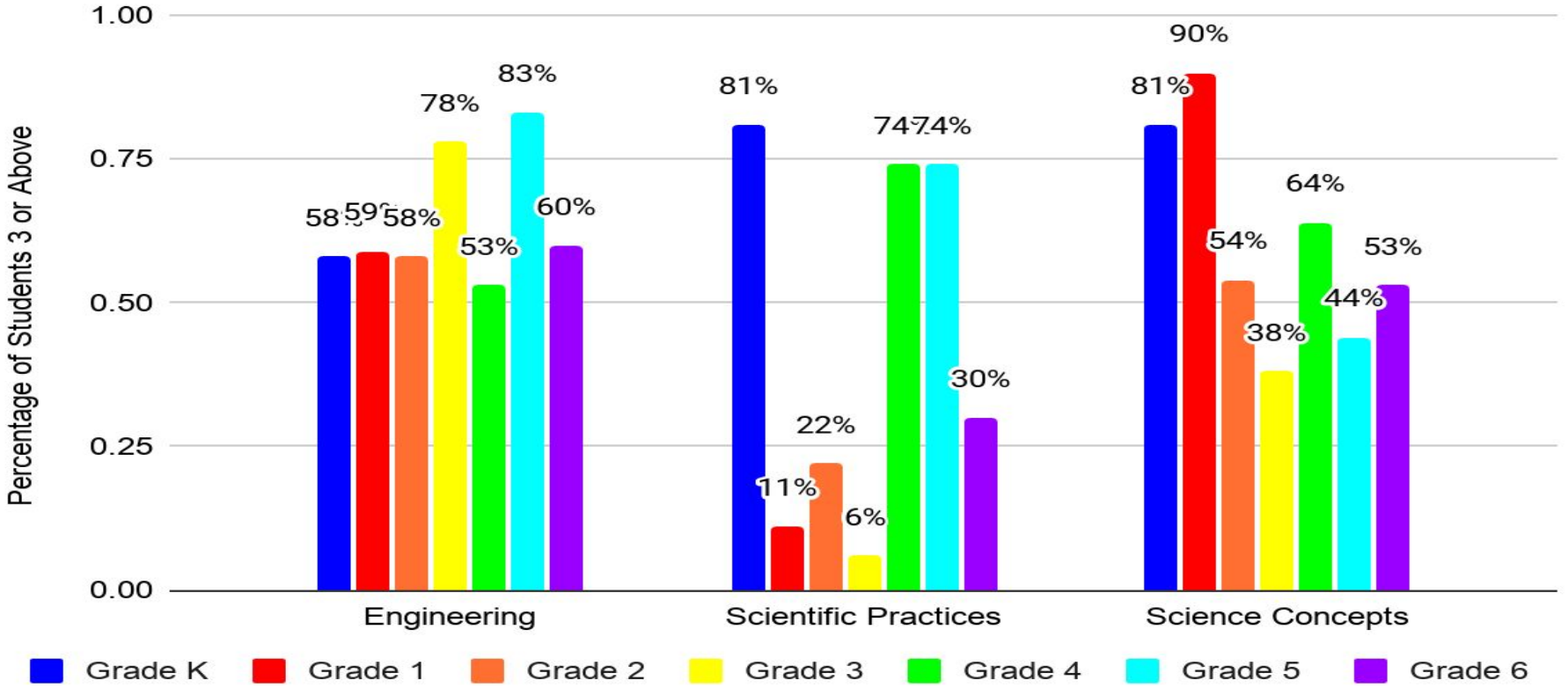
SAT / ACT SCORES

Class	2019	2020	VT Average
ERW	581	553	559
Math	566	543	545
ACT	24.8	24.3	23.3

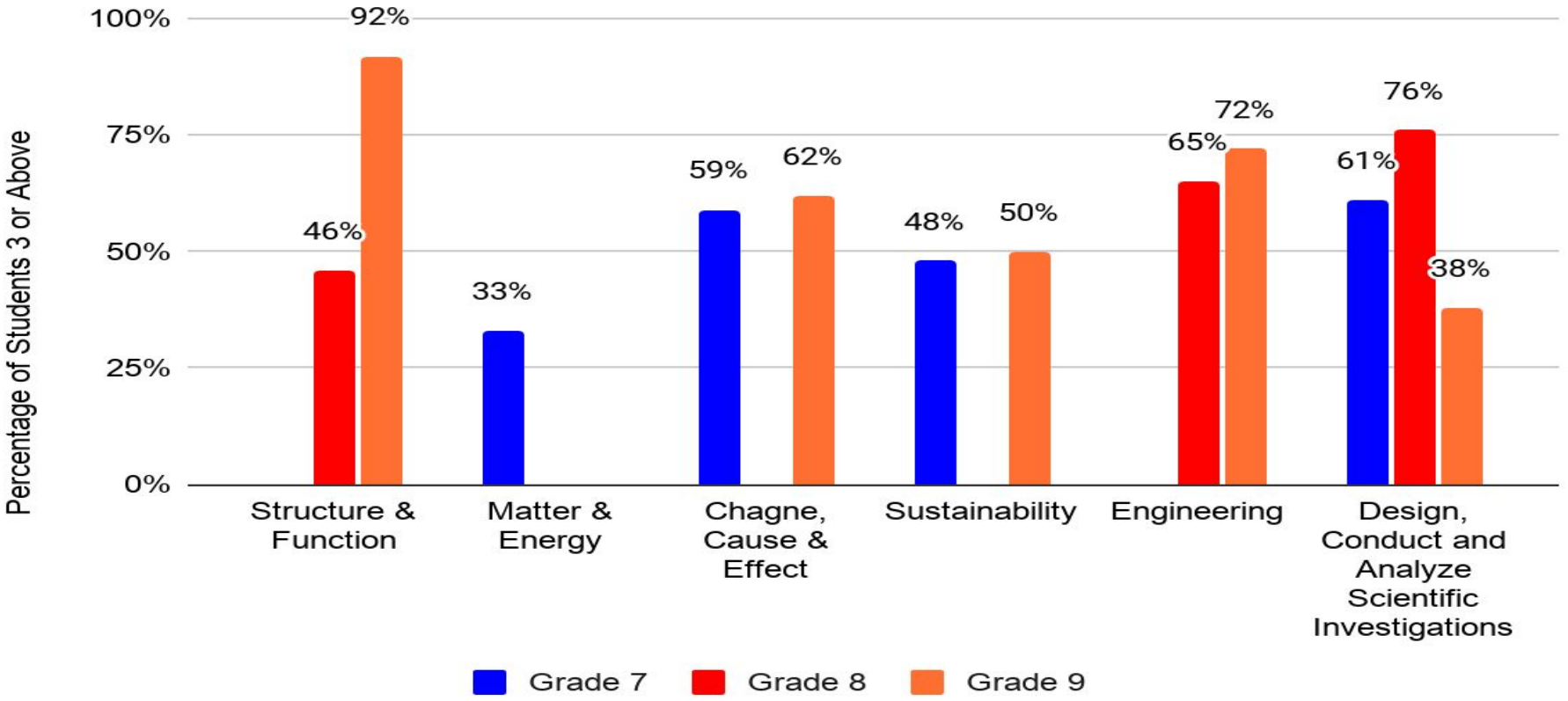
WCUUSD Elementary Report Card Data
January 2020



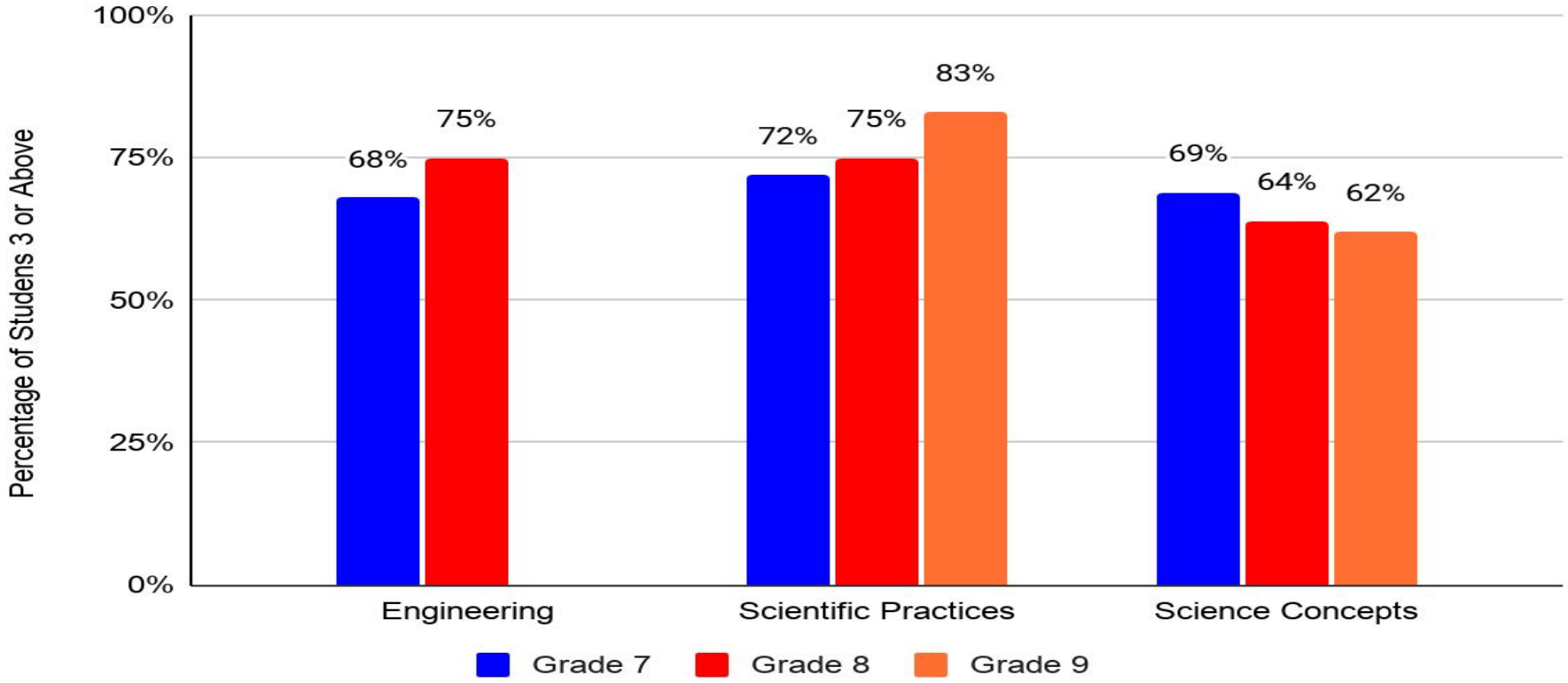
WCUUSD Elementary Report Card Data
January 2021



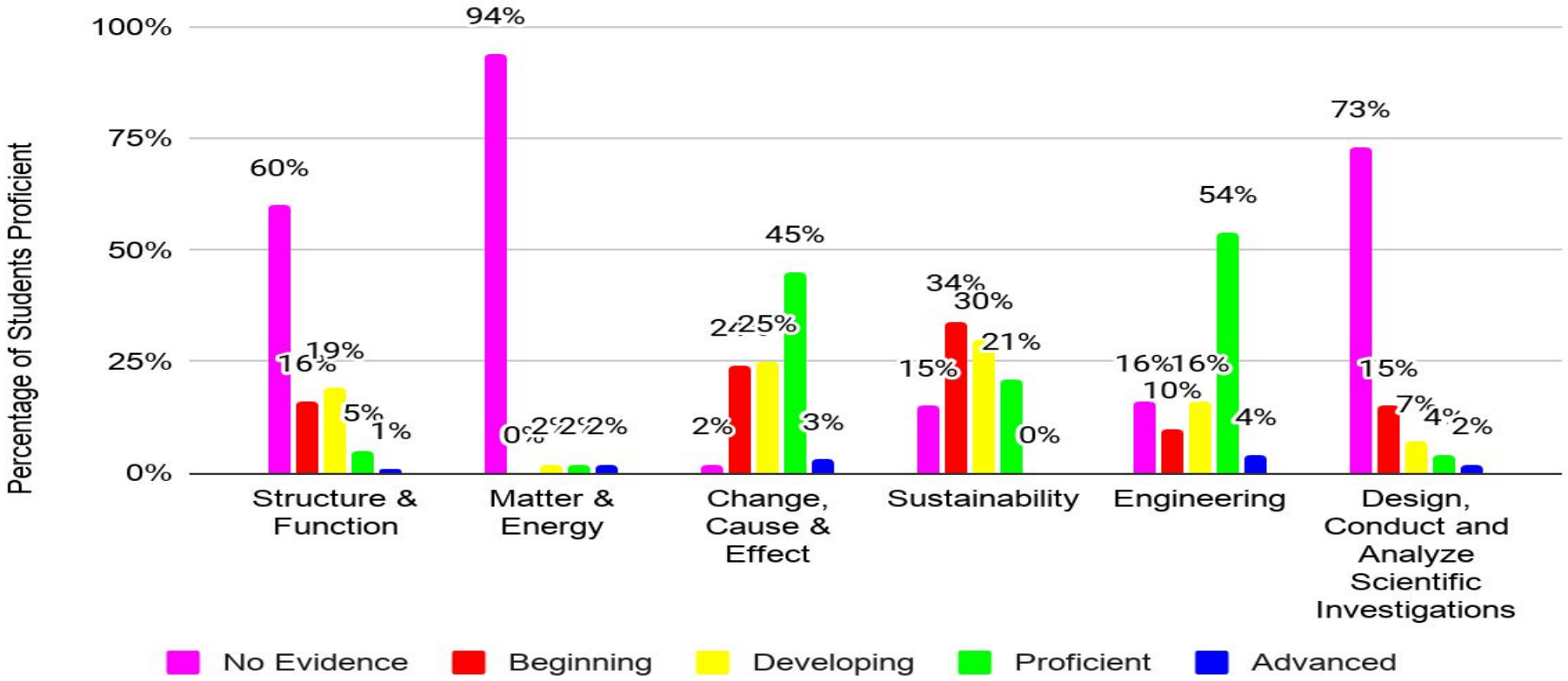
WCUUSD Middle School Report Card Data
June 2020



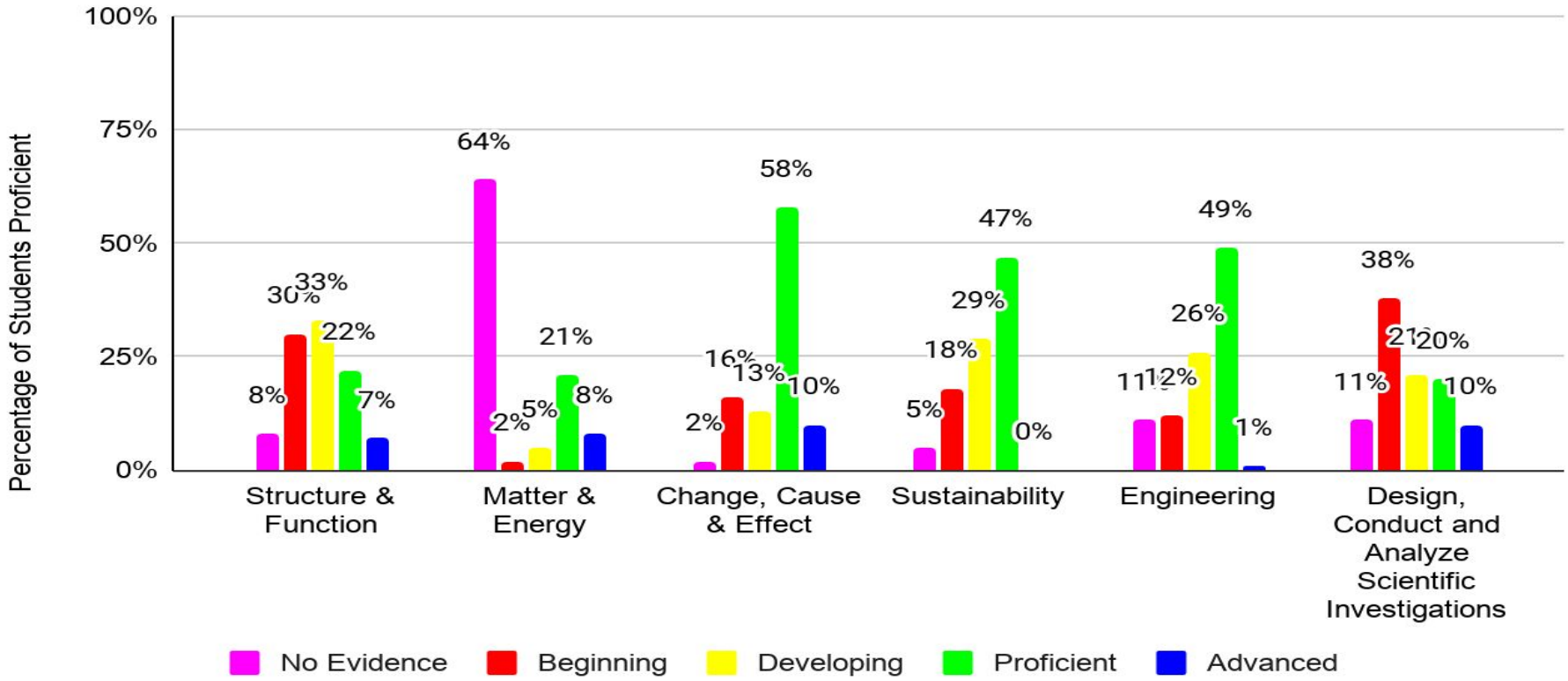
WCUUSD Middle School Report Card Data
January 2021



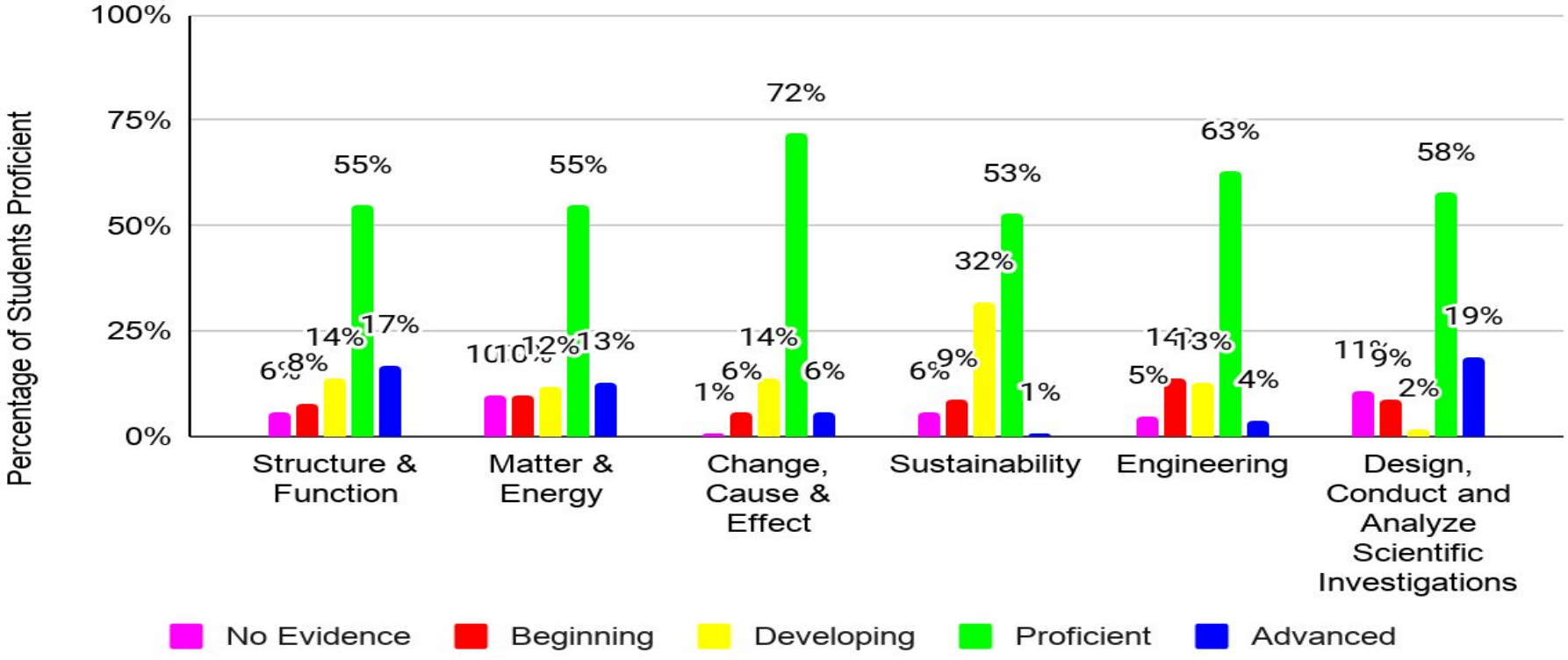
Assessment Data: PBGR's for Current Grade 10 June 2020 (End of 9th Grade)



Assessment Data: PBGR's for Current Grade 11
June 2020 (End of 10th Grade)



Assessment Data: PBGR's for Current Grade 12 June 2020 (End of 11th Grade)

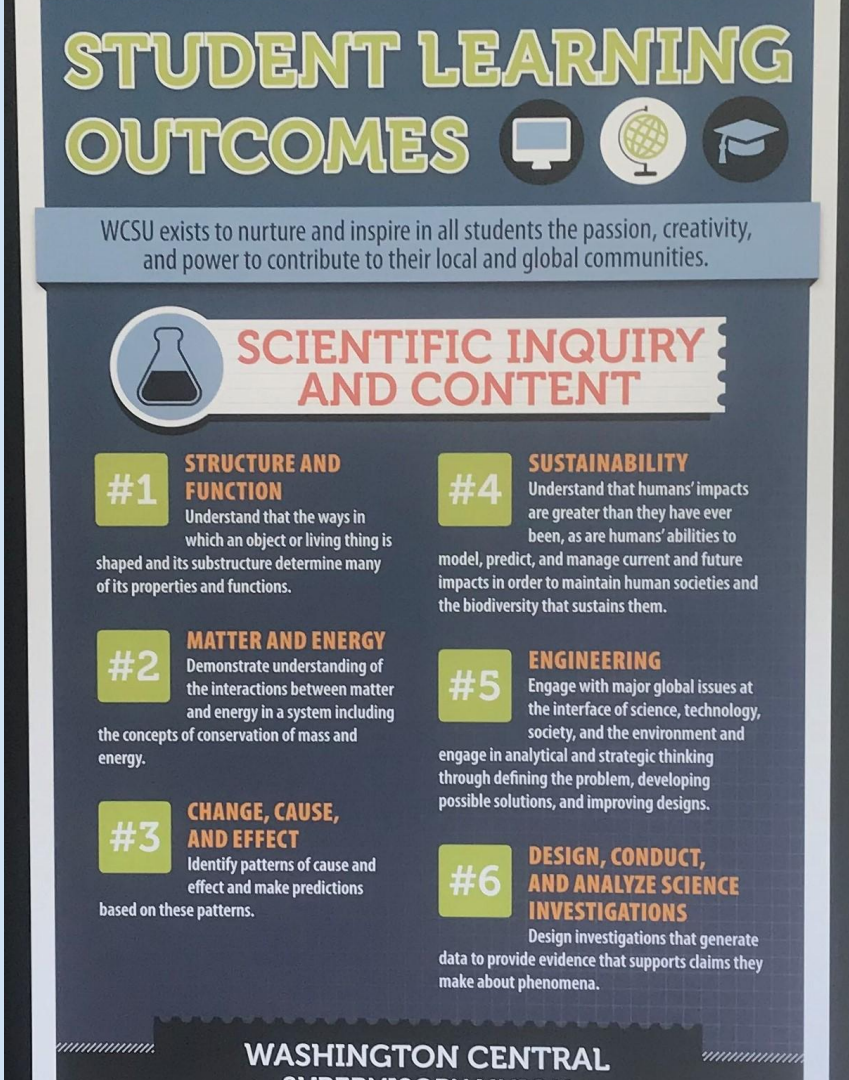


Celebrating Our Students

- High School Awards Ceremony June 2020 (26:27-34:15)
- Senior Awards Ceremony June 2020 (22:55-27:37)

School Board Role

- Support for continued professional learning
- Considerations regarding instructional time
- What else?



Modified Making Meaning Protocol

- Review Jamboard results:
  - What did you see?
  - What questions did this presentation raise for you?
  - What struck you as significant?
  - What are the implications for our work?
- Then respond:
  - What sense are you making of this presentation?
  - How will this understanding inform our work?

Next Steps and Debrief

- How will we share this work with the full board? What are one or two headlines or key points to share with full school board?
- What worked about this process?
- What might we change for next month's SLO presentation?