Common Core Professional Development
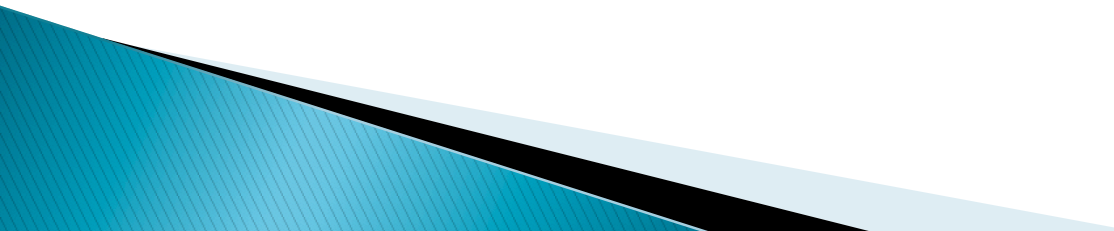
April, 2014

Purpose of the Day

▸ What does rigorous instruction look like for each student in a Common Core classroom?

◦ The role of :
  • the teacher
  • the student
  • the learning opportunities /tasks

◦ Planning for meaningful instruction

Outcomes

- Deepen understanding of rigorous instruction for all students based on Common Core Standards
- Expand understanding and align instruction to increase opportunities for Critical Thinking, Reasoning and Evidence
- Plan for and build structures for Collaborative Conversations
- Apply new learning to plan instruction

Morning Session– Whole Group

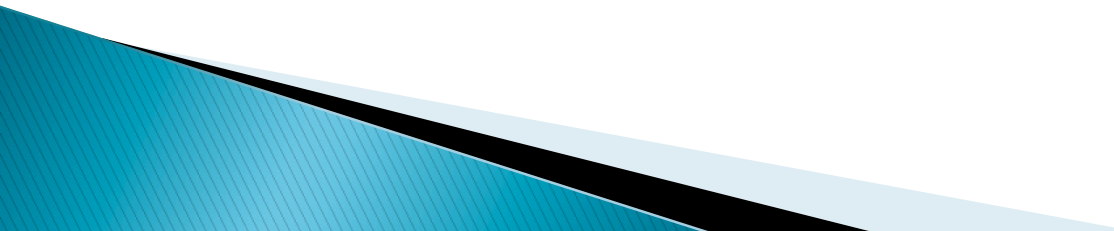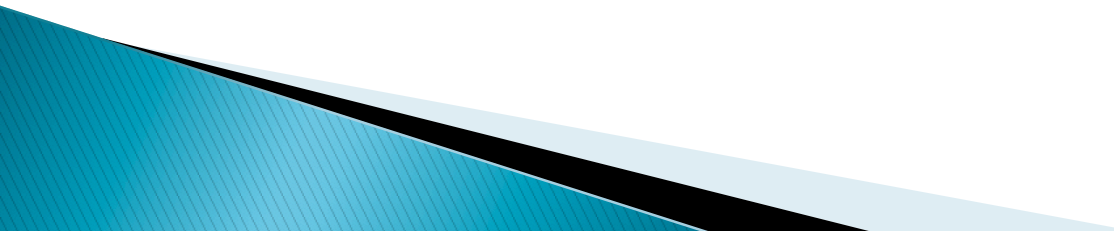# Welcome Video Superintendent Marten

http://www.sandi.net/Page/62280

As a District We Know…

- Sites must keep connected to the standards/ frameworks in all content areas while paying close attention to the academic build between grade levels.
- Speaking and Listening Standards apply across all content areas.
- Students who are College and Career Ready are able to demonstrate all the Literacy, Mathematical and Next Generation Science Practices in a Cross-curricular manner.

Cross-Curricular Focus Areas

- In order to be ready for College and Career, students need to engage in Critical Thinking, Intellectual Struggle, and Collaboration.

- These focus areas should be incorporated throughout the school day.

- Let's take a closer look at each one.

Cross-Curricular Focus Areas

○ <u>Critical Thinking , Reasoning and Evidence</u>: Students develop and apply critical thinking and reasoning grounded in evidence, viable argument and rationale

Cross-Curricular Focus Areas

- **<u>Intellectual Struggle</u>:** Students are actively and cognitively engaged in learning , demonstrating effort, perseverance and tenacity as they work toward independence
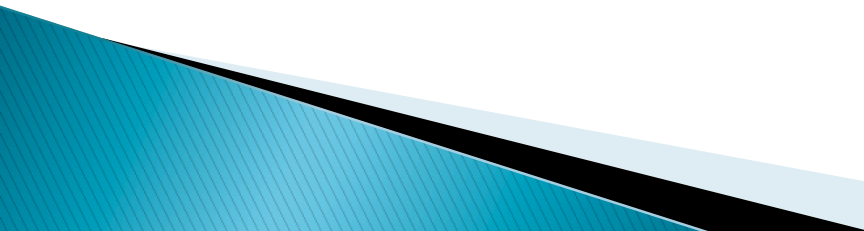
Cross-Curricular Focus Areas

- <u>Collaborative Conversations / Academic Language Expansion</u> : Students expand language through regular use and engagement with academic text, tasks and dialog.
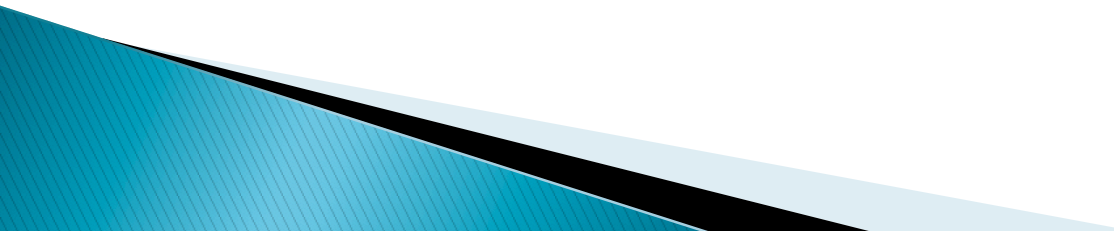
As a Group – Chart

▸ Think about the 3 Cross-Curricular Focus Areas as they apply to our site/department/roles:

◦ What are our strengths?

◦ What are our challenges?

◦ What are our wonderings or next steps?

A Closer Look at Critical Thinking, Reasoning and Evidence

- We need to:
  - Prepare our instruction to reach higher levels of rigor and relevance

  - Intentionally plan tasks, assessments and student learning outcomes that are elevated

  - Deepen our knowledge of how to do this type of planning within our PLCs, Grade Level or Content Department teams

Let's Begin with a Study of Depth of Knowledge

▶ We will:
  ◦ Learn background information

  ◦ Watch a video

  ◦ Review DOK levels and Cognitive Rigor Matrices

  ◦ Apply the knowledge to our most recent PLC or grade level work

Depth of Knowledge (DOK)

Promoting Rigor and Relevance in Learning

What is Depth of Knowledge?

Webb's DOK Levels

Recall and Reproduction: Level 1

Skills & Concepts: Level 2

Strategic Thinking: Level 3

Extended Thinking: Level 4

DOK: Depth of Knowledge

- CST focused mainly on DOK 1 and DOK 2.

- Smarter Balanced (SBAC) assessments place more emphasis on DOK 3 and DOK 4.

- DOK is not an exact science.

- DOK is not about difficulty but more about the thinking process.

Recall and Reproduction DOK Level 1

- **DOK 1 requires recall of information, such as a fact, definition, term, or performance of a simple process or procedure.**

ELA Example:

What is the metaphor in the first paragraph of the novel?

Math Example:

Name all the parts of the circle shown.

Skills/Concepts DOK Level 2

- **DOK 2 includes the engagement of some mental processing beyond recalling or reproducing a response. Items require students to make some decisions as to how to approach the question or problem.**

- **These actions imply more than one mental or cognitive process/step.**

ELA Example:

Identify and summarize the major conflicts in the literary text.

Math Example:

Determine a strategy for estimating the number of pennies in a jar.

Strategic Thinking DOK Level 3

- **DOK 3 requires deep understanding as exhibited through planning, using evidence, and more demanding cognitive reasoning. The cognitive demands at Level 3 are complex and abstract.**

- **An assessment item that has more than one possible answer and requires students to justify the response they give would most likely be a Level 3.**

Strategic Thinking DOK Level 3

ELA Example:

Analyze or evaluate the effectiveness of literary elements (e.g., characterization, setting, point of view, conflict and resolution, plot structures).

Math Example:

Create a unit of formal geometric constructions.

Extended Thinking DOK Level 4

- **DOK 4 requires <u>high cognitive demand</u> and is very complex. Students are expected to make connections—relate ideas *within* the content or *among* content areas—and have to select or devise one approach among many alternatives on how the situation can be solved.**

- **Due to the complexity of cognitive demand, DOK 4 often requires an extended period of time.**
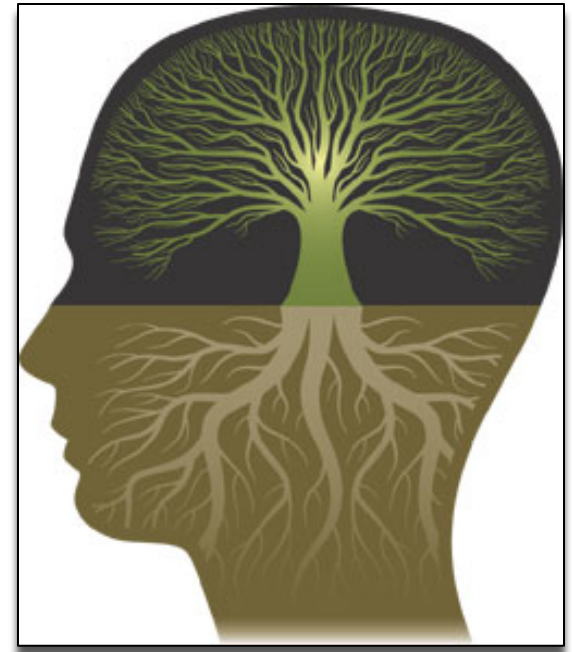
Extended Thinking DOK Level 4

ELA Example:

Synthesize information across multiple sources or texts.

Math Example:

Develop a rule for a complex pattern and locate a phenomenon that exhibits this behavior.
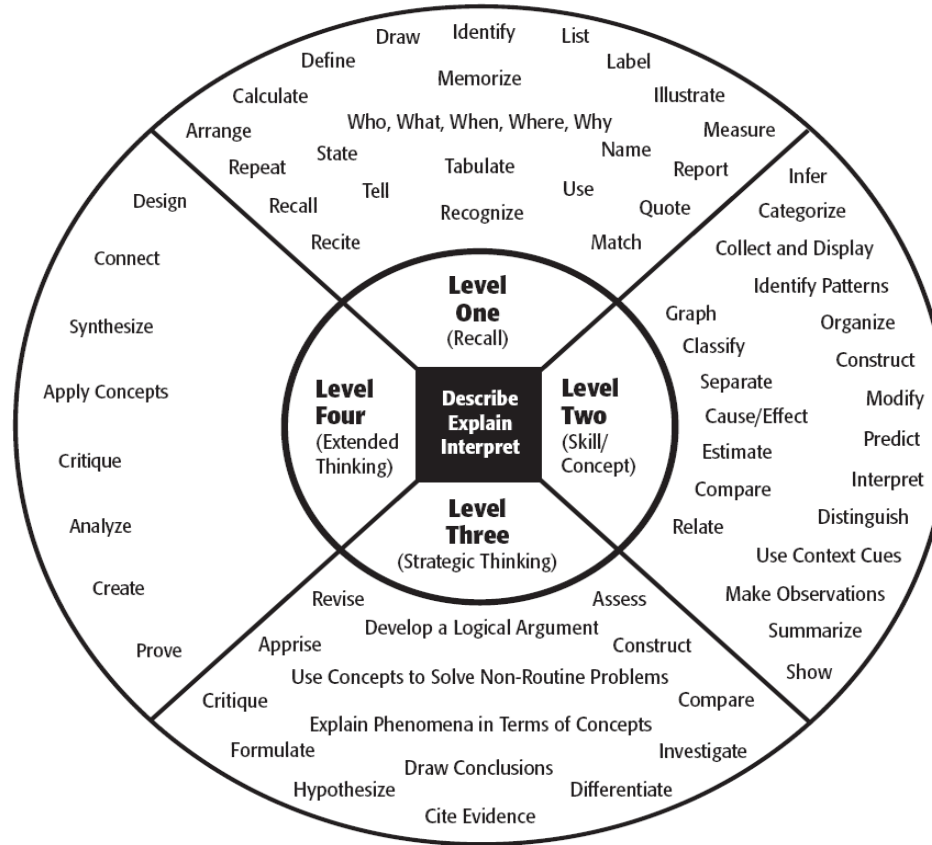
The Depth of Knowledge is NOT determined by the verb but the context in which the verb is used and the depth of thinking required.

Depth Of Knowledge Video

- Watch the video provided.
- http://vimeo.com/42788913

Depth of Knowledge (DOK) Levels

The DOK wheel shows four levels arranged around a center labeled "Describe, Explain, Interpret":

Level One (Recall): Draw, Identify, List, Define, Label, Memorize, Illustrate, Calculate, Who What When Where Why, Measure, Arrange, State, Name, Repeat, Tabulate, Report, Tell, Use, Recall, Recognize, Quote, Recite, Match

Level Two (Skill/Concept): Infer, Categorize, Collect and Display, Identify Patterns, Graph, Organize, Classify, Construct, Separate, Modify, Cause/Effect, Predict, Estimate, Interpret, Compare, Distinguish, Relate, Use Context Cues, Make Observations, Summarize, Show, Compare, Investigate, Differentiate

Level Three (Strategic Thinking): Revise, Assess, Develop a Logical Argument, Construct, Apprise, Use Concepts to Solve Non-Routine Problems, Critique, Explain Phenomena in Terms of Concepts, Formulate, Draw Conclusions, Hypothesize, Cite Evidence

Level Four (Extended Thinking): Design, Connect, Synthesize, Apply Concepts, Critique, Analyze, Create, Prove

Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Recall elements and details of story structure, such as sequence of events, character, plot and setting.	Identify and summarize the major events in a narrative.	Support ideas with details and examples.	Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.
Conduct basic mathematical calculations.	Use context cues to identify the meaning of unfamiliar words.	Use voice appropriate to the purpose and audience.	Apply mathematical model to illuminate a problem or situation.
Label locations on a map.	Solve routine multiple-step problems.	Identify research questions and design investigations for a scientific problem.	Analyze and synthesize information from multiple sources.
Represent in words or diagrams a scientific concept or relationship.	Describe the cause/effect of a particular event.	Develop a scientific model for a complex situation.	Describe and illustrate how common themes are found across texts from different cultures.
Perform routine procedures like measuring length or using punctuation marks correctly.	Identify patterns in events or behavior.	Determine the author's purpose and describe how it affects the interpretation of a reading selection.	Design a mathematical model to inform and solve a practical or abstract situation.
Describe the features of a place or people.	Formulate a routine problem given data and conditions.	Apply a concept in other contexts.	
	Organize, represent and interpret data.		

After watching the video

- With a partner review the:
  - Depth of Knowledge (DOK) Level wheel
  - Hess' Cognitive Rigor matrices

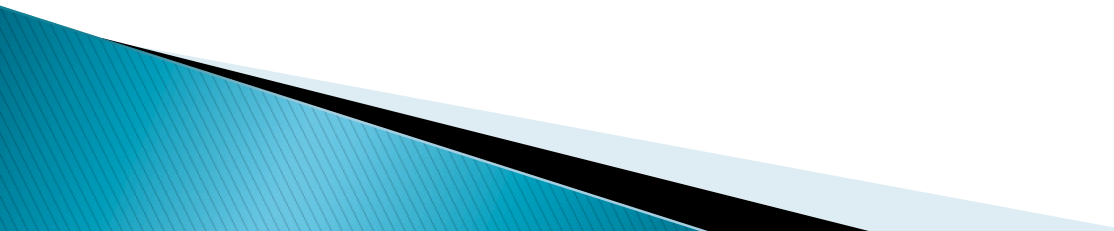 - What are the implications for instruction and student learning?

Additional Articles/ Resources

- To read further about Critical Thinking and Depth of Knowledge consider the following from the PD Day Resources:

  ◦ *Importance of Critical Thinking* (NEA)

  ◦ *A Guide for Using Webb's Depth of Knowledge with Common Core State Standards* (Hess)

  ◦ *Depth of Knowledge Levels for Four Content Areas* (Webb)

Applying this to Instruction

- Consider a lesson taught recently or the work from your last PLC or Department planning session.
  - Using the Depth of Knowledge Level Chart and the Cognitive Rigor Matrices Determine:
    - The Depth of Knowledge of the tasks and learning opportunities you designed for students.
    - How the tasks and learning could be adjusted to provide more opportunities for critical thinking at high levels.

Share-Out : Based on Your Analysis of the Tasks

- What did you discover?
- Where would you have been able to add more rigor and critical thinking? (Identify specific places in the lesson)
- What types of questions or tasks could you have used to change the level or rigor?
- How will you use this knowledge in future PLC/content area planning? What might you do differently?

Collaborative Conversations
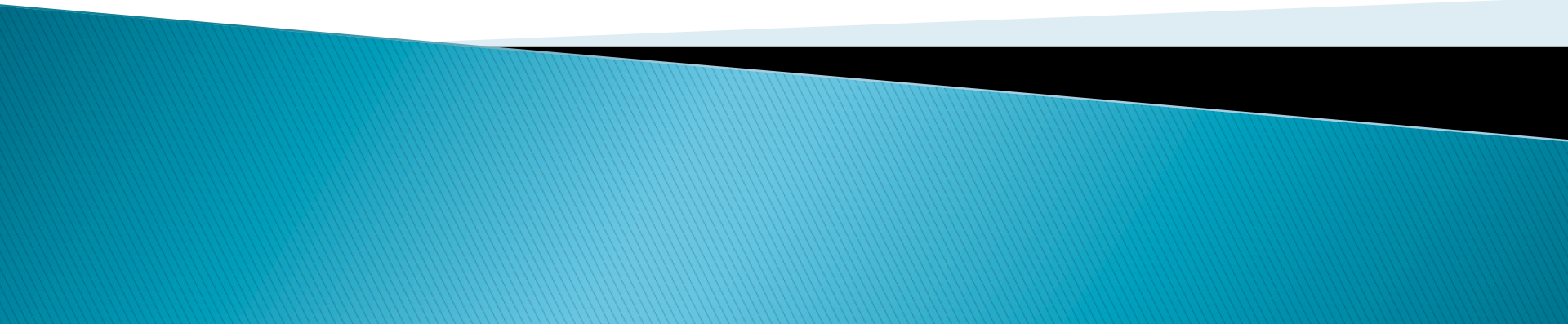
Why Collaborate?

- "Communication is a telling of one's ideas, making one's thinking clear to another. But dialogue is a coming to an intellectual exchange willing to see and hear something new in the exchange and actually creating a newer, stronger understanding."

- (David Bohm – *Comprehension Through Conversation*)

This Requires Adults to …

- Release the work to the students (65% student talk/35 % teacher talk)
- Build structures and routines that facilitate collaborative conversations
- Design tasks that are challenging enough for students to get to a high level of collaboration
- Ensure tasks are rigorous, interesting and require authentic communication
- Engage students in productive intellectual struggle

- (Adapted from Frey and Fisher – Rigorous Reading)
- (Adapted from Tim Kanold, 2014)

What is the Link to the Future?

Why do we need authentic conversation with diverse partners?
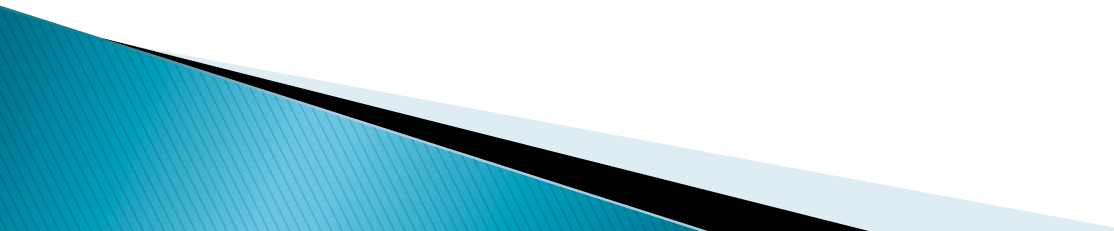
Let's study one company's approach to innovation through collaboration.

Talk and innovation

- "Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."
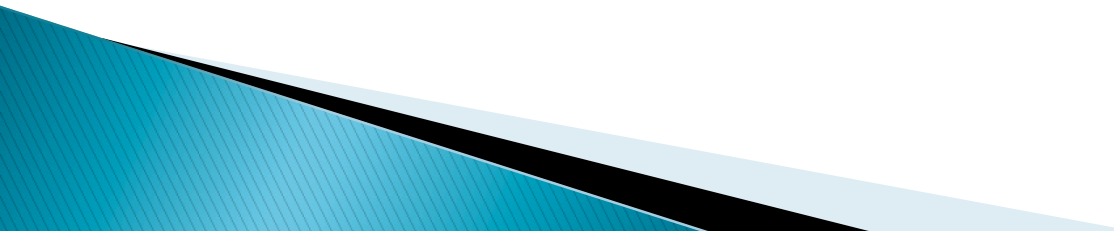- ~ Tim Brown, president and CEO

Video Prompt

- As you're viewing, consider the importance of collaboration as a means to innovate.

- Think about what norms need to be in place for this type of collaboration to be successful.
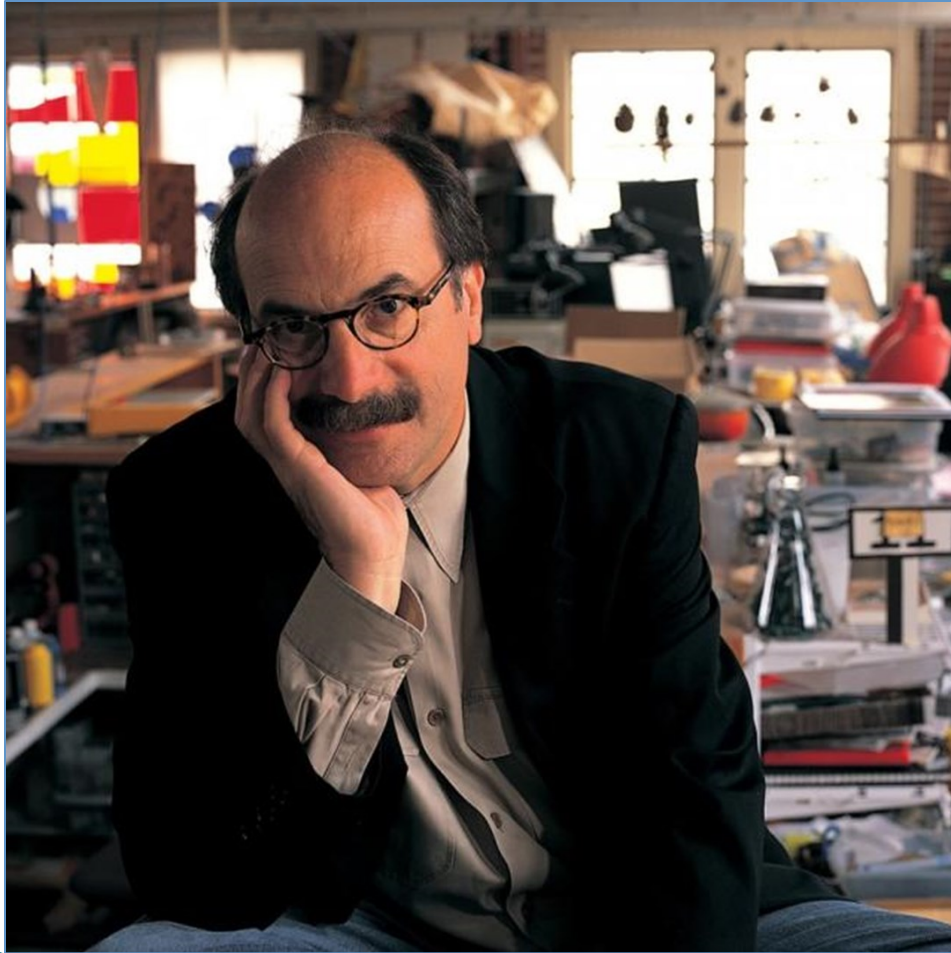
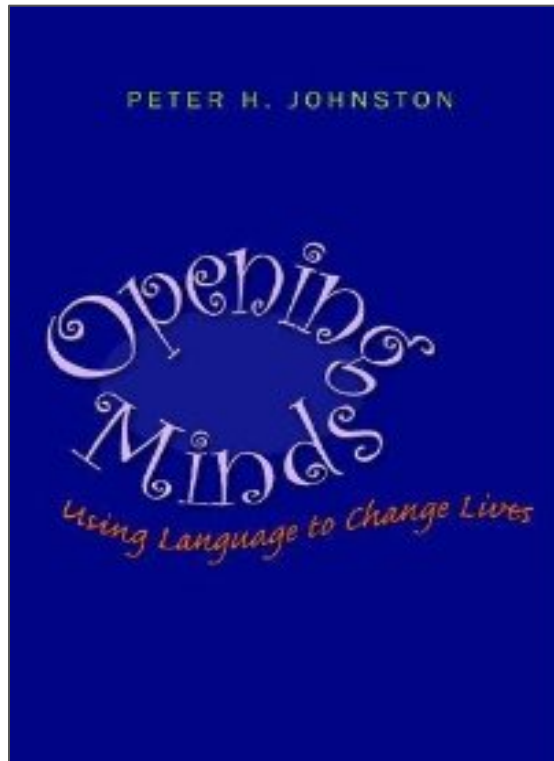*…you get to a place you just can't get to in one mind.*

~ David Kelley

- Think and talk: How would you describe the nature of talk that enables Design Thinking?

- What norms must be in place in classrooms for this type of collaborative talk to occur?

A dialogic classroom is ...

… one in which there are lots of open questions and extended exchanges among students. These are not classrooms based on the delivery of facts.

~ Peter Johnston
Opening Minds

How does this definition of talk align with CCSS?

COMMON CORE
STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

▸ Being productive members of these conversations requires that students contribute accurate, relevant information; **respond to and develop what others have said**; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.

~ CCSS ELA pg. 22

Speaking and Listening Standards

- SL.CCR.1– CCR Speaking and Listening Anchor Standard 1: Prepare for and participate effectively in a range of conversations and collaboration with diverse partners, building on others; ideas and expressing their own clearly **and persuasively.**

As a Grade Level Team...

▸ Review the Speaking and Listening Standards across the grade levels

◦ What is the build over the grade span?

◦ What implications does this have for planning, instruction, and student learning ?
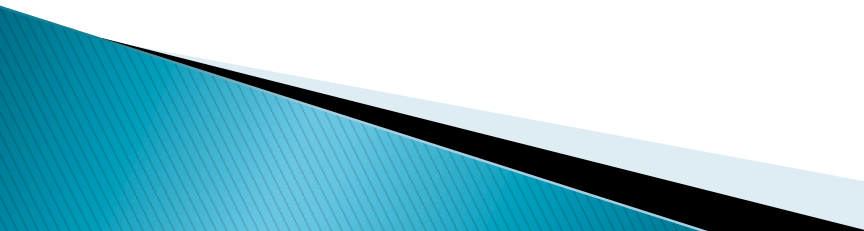
Additional Articles/ Resources

- To read further about Collaborative Conversations/Talk consider the following:

  ◦ *Rigorous Reading – Chapter 4 Collaborative Conversations by Frey and Fisher*

  ◦ *What Do Complex Texts Mean for English Learners and Language Minority Students by Lily Wong Filmore*

Video Examples of Collaborative Conversations /Quality Talk

- **Viewing Options:**
- Break into Grade Levels/Departments to watch selected videos or remain as a whole group to watch and discuss
  - Smaller groups would allow the staff to view more videos
- The video links have been provided on the website
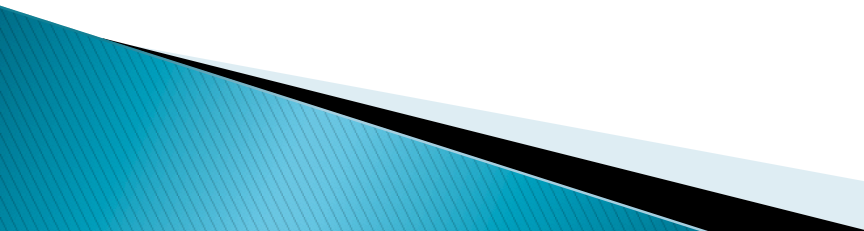 - Utilize the guiding questions for each video as you watch

After Watching the Videos Discuss as a Whole Group

- What is <u>our</u> vision of Collaborative Conversations?

  ◦ What is the role of the student?

  ◦ What is the role of the teacher?

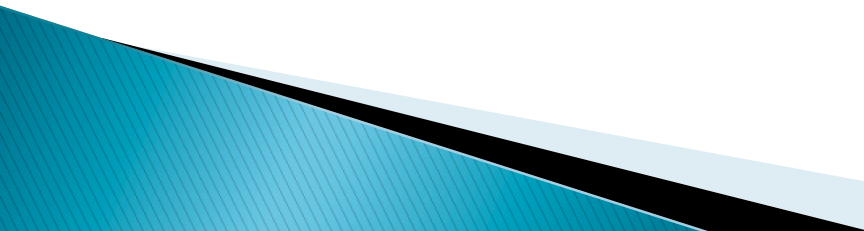 ◦ What should be considered when designing learning opportunities/tasks?

Thinking About Our Vision…

- How will you intentionally plan for this in the day?
    - What are the goals?
    - What are the materials?
    - What is the assessment/accountability?
- What structures/procedures do you need to build for this to occur?
    - Sentence Frames
    - Access to complex tasks and text
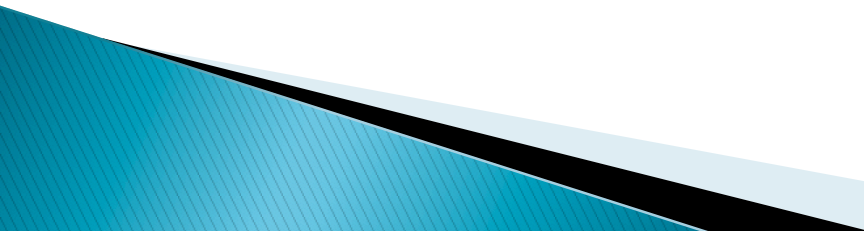   - Multiple ways for students to engage in conversation

Preparation for Afternoon Planning

- After lunch staff will split into Grade Level, Department or Content Area Teams.
- As a team you will be applying the learning from the morning to your planning cycle.
  - How will you intentionally plan learning opportunities that involve critical thinking and reasoning?
  - How will you intentionally embed Collaborative Conversations and questioning strategies into the learning opportunities?

Materials to Have Available

- Grade level or content area standards
- Speaking and Listening Standards
- Curriculum Maps
- Depth Of Knowledge Handout(s)
- Recent lesson plan from PLC or content
- Laptops
- Instructional resources for your content area or grade level

Questions to Consider in the Afternoon Planning

- What norms can be put into place to establish the collaborative culture?
- What type of rigorous tasks will students engage in?
  - How will I scaffold the learning, without lowering the level of cognitive demand?
- What structures will I put in place to ensure collaborative conversation?
  - What questions will I ask?
- How will I assess what students know?

Whole Group Closing

- Have each grade level or team share out one area of focus they planned for today.

- Determine if there are any site/department agreements that were made in the process.

- Complete an evaluation of the day.

- Complete Timecards and Sign-out for Time-Keeping purposes