



TEACHER PRACTICE: FOSTERING INTELLECTUAL ENGAGEMENT



Introduction

Traffic Light Protocol

 Rarely

 Sometimes

 Always

- Think about yourself as a novice teacher.
- Read each statement about teacher practice. Place a green, yellow or red dot to indicate the frequency with which you use this practice.



Teacher Practices For Creating Opportunities For Engagement

In an intellectually engaged classroom...

1. A consistent classroom management plan is employed.
“[Teachers] plan for classroom management. ...students practice procedures enough to execute them in a routine fashion.”

Marzano – **Classroom Management**

2. Plans include student learning activities.
“...a teacher’s role is not so much to teach as it is to arrange for learning. That is, a teacher’s essential responsibility is...to design (or select or adapt) learning activities such that students learn important content.”

Danielson – **Planning**



Teacher Practices For Promoting Engagement

3. Higher order questions are asked.

“Teachers’ questions probe student thinking and serve to extend understanding.”

Danielson – **Questions**

4. Cooperative learning is used consistently and systematically

“Cooperative learning is a process. To support the success of cooperative learning, teachers must teach the steps of the process, provide students with opportunities to practice those steps, and clearly define the norms and parameters within which cooperative learning will take place.”

McRel – **Cooperative Learning**



Teacher Practices For Enhancing Engagement

5. Technology is used to enhance learning.

“Teacher uses instructional technology to enhance student learning.”

Stronge – **Technology**

6. Reflection is a form of practice.

“Reflection can involve several cognitive activities that lead to stronger learning; retrieving knowledge and earlier training from memory, connecting these to new experiences, and visualizing and mentally rehearsing what you might do differently next time.”

Brown-- **Make it Stick**



Why Intellectual Engagement?

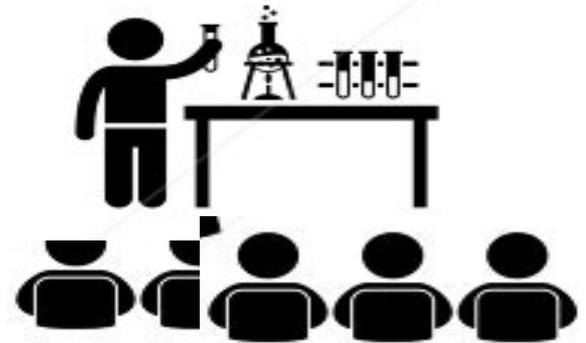
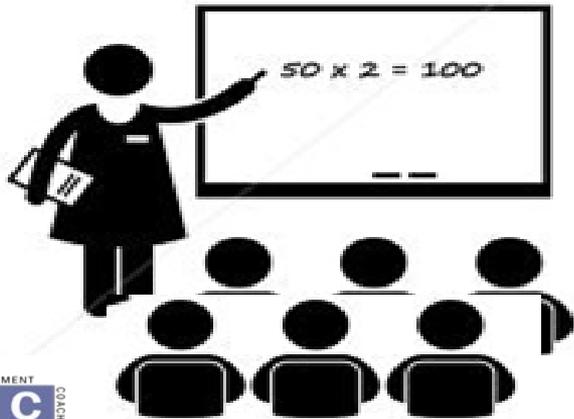
- Leading experts on teaching practice identify student engagement as core to learning.

Danielson	Marshall	Marzano	McREL	Stronge
3c	A.G C.G	DQ: 5	Standard IV	Performance Standard 3

This crosswalk includes the most commonly selected (but not all) NJDOE- approved instruments.

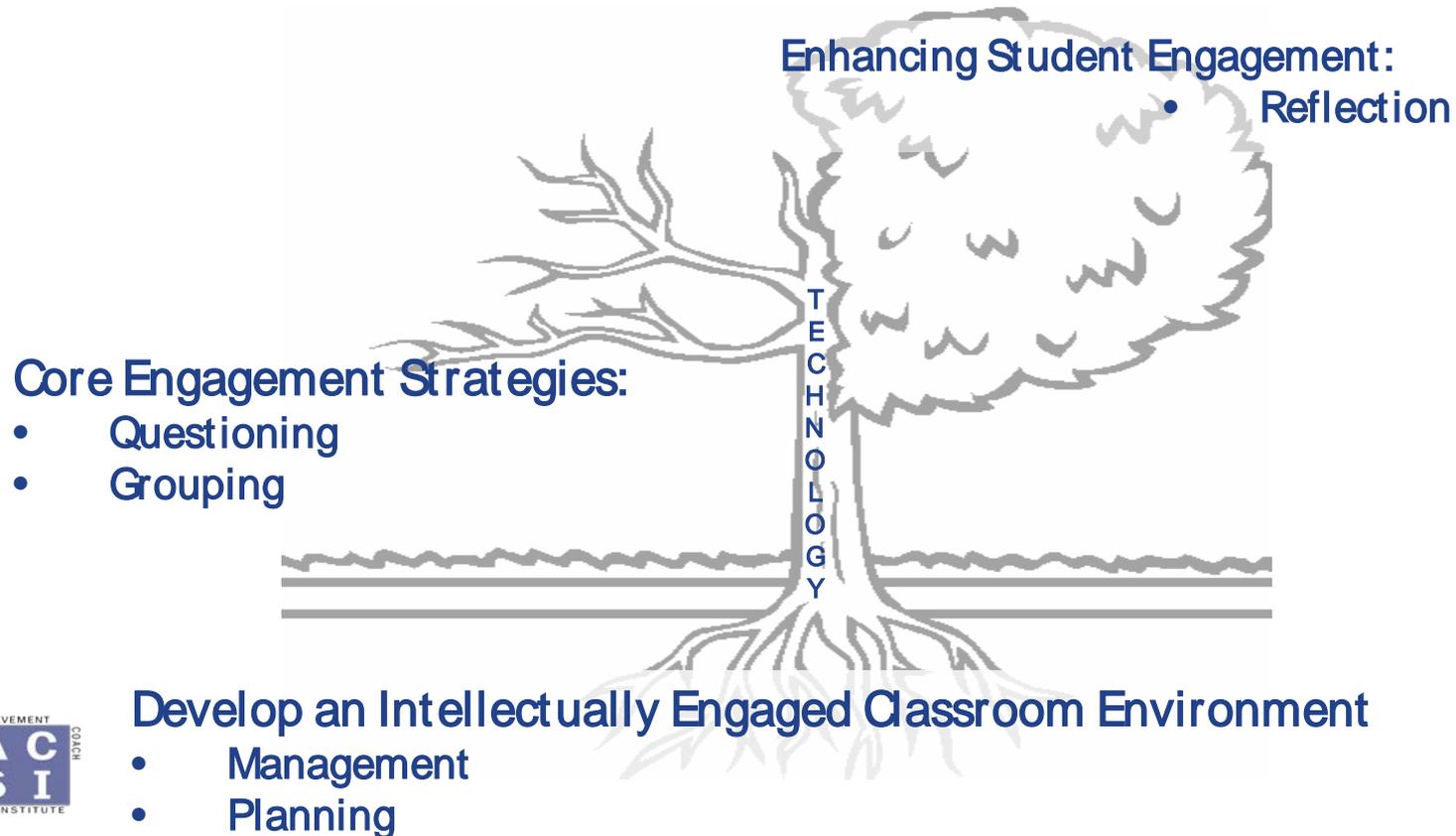
Why Intellectual Engagement?

- Additionally, these frameworks all point to **student-leadership** in lessons as evidence of effective instruction throughout their domains.





Fostering Intellectual Engagement





Today's Agenda

- INTRODUCTION
- FOUNDATION FOR ENGAGEMENT
- CORE ENGAGEMENT STRATEGIES
- ENHANCING ENGAGEMENT



Achievement Coach Program

- **This session is part of the New Jersey Achievement Coach Program.**
- **Achievement Coaches are educators selected by their districts as leaders who share their knowledge of teaching and learning with their peers.**
- **The three sessions led by Achievement Coaches were developed by New Jersey's educators to address specific needs.**

Norms

1. Active Listening and Learning

- Listen hard, speak softly.
- Take ownership over your learning.
- Be solution-oriented.
- **Think about how this looks in your classroom or school.**

2. Parking Lot

- Please write any outstanding questions you have on the “Parking Lot” in the back of the room.

3. Cell Phones

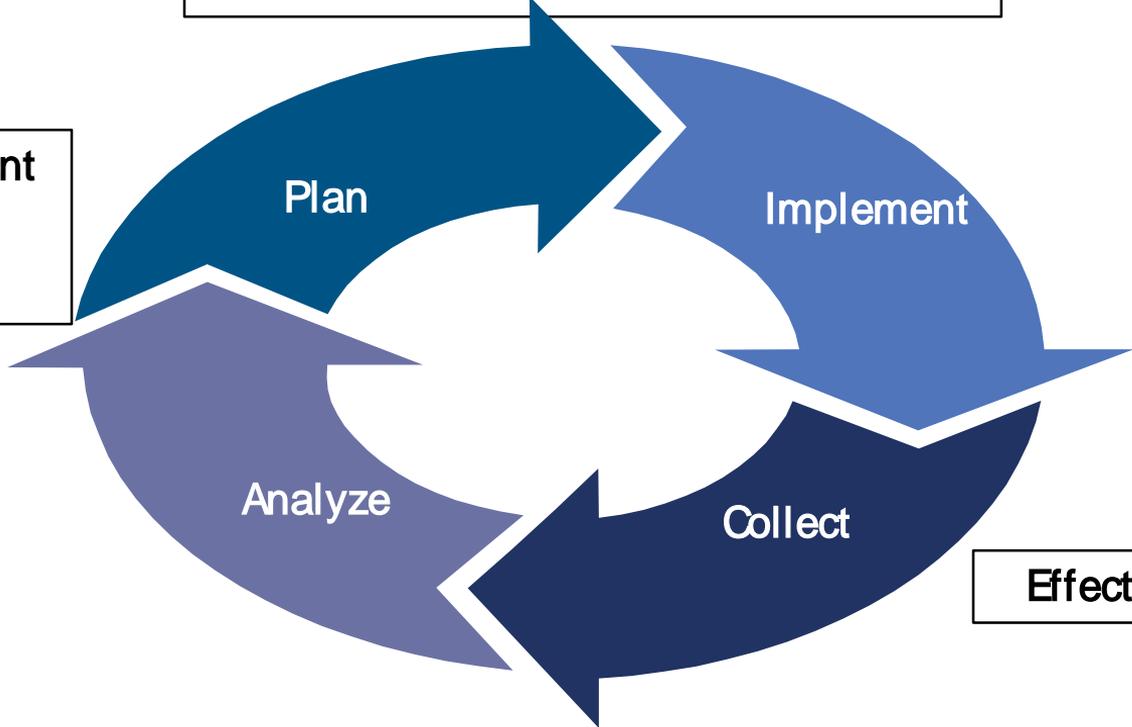
- Please keep phones on silent and take emergency calls/texts outside.





Monitoring and Adjusting in the Teaching and Learning Cycle

Fostering Intellectual Engagement



Using Assessment Data to Drive Instruction

Effective Assessments



Session Objectives

Apply concepts from today's presentation in planning concrete next steps towards...

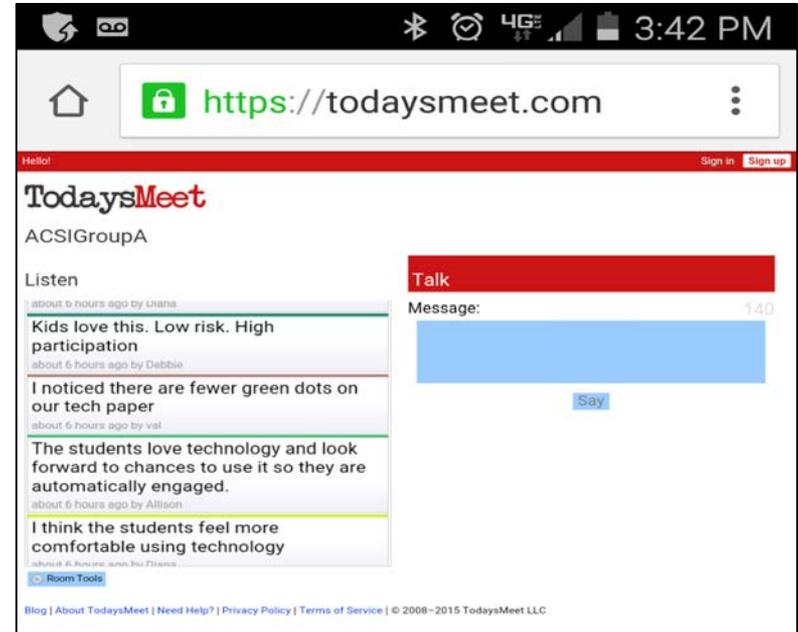
- ✓ developing a classroom environment which fosters an intellectually engaged class.
- ✓ creating structures in which high quality questions and student discussions are a regular aspect of the classroom.
- ✓ using instructional groups in the most effective and efficient manner.
- ✓ utilizing technology to advance student engagement and learning.
- ✓ using reflection as a tool to best support teaching and learning.

Technology to Support Engagement

- As we discuss technology as a strategy to facilitate engagement, you are invited to contribute to an online discussion using:

Today's Meet

- Non-tech option:
Parking Lot with Post-its

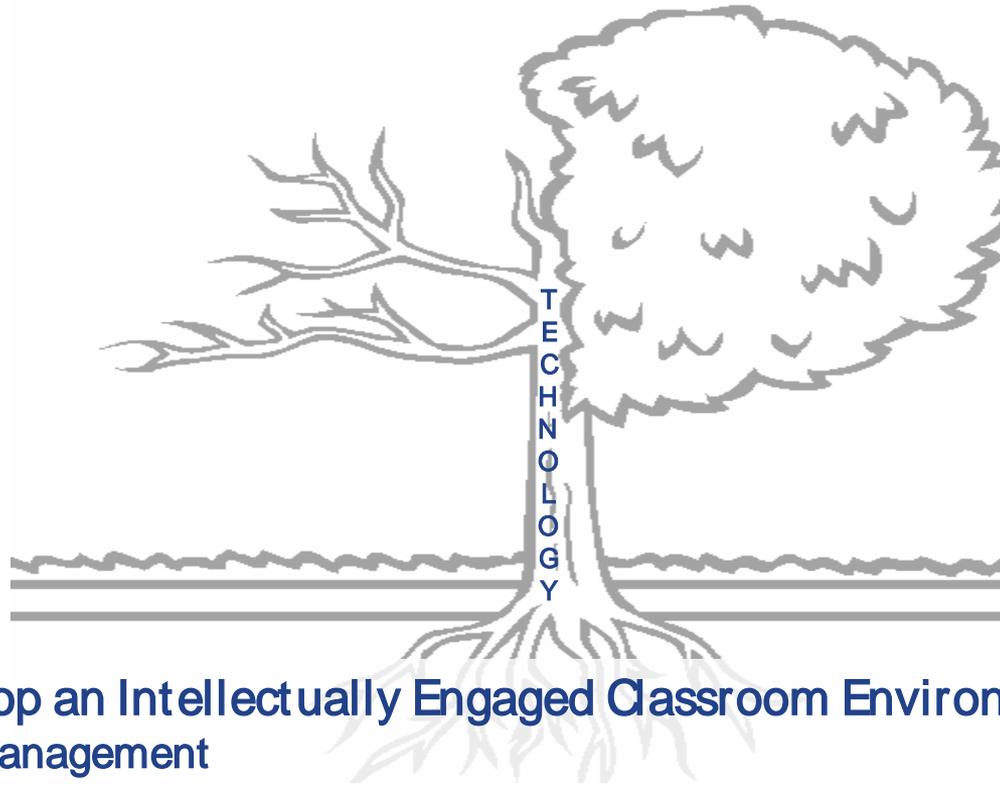




Today's Agenda

- INTRODUCTION AND FRAMING
- FOUNDATION FOR ENGAGEMENT
- CORE ENGAGEMENT STRATEGIES
- ENHANCING ENGAGEMENT

Fostering Intellectual Engagement



Develop an Intellectually Engaged Classroom Environment

- Management
- Planning



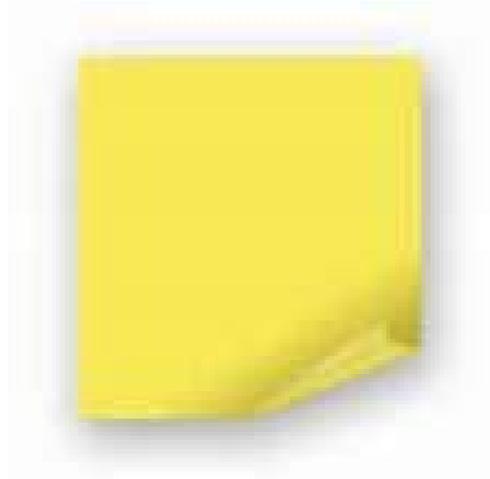
Classroom Management

Essential Question:

What does a classroom environment look like that engages students in their own learning?



Classroom Management Activity

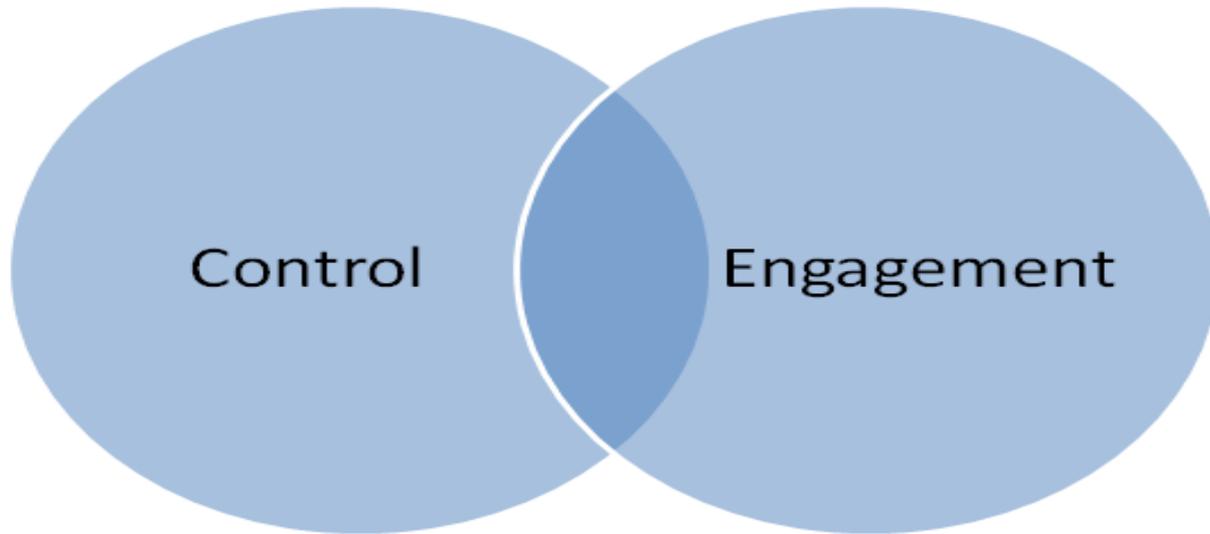


- On separate post-its, write 3-5 classroom management strategies that you utilize.

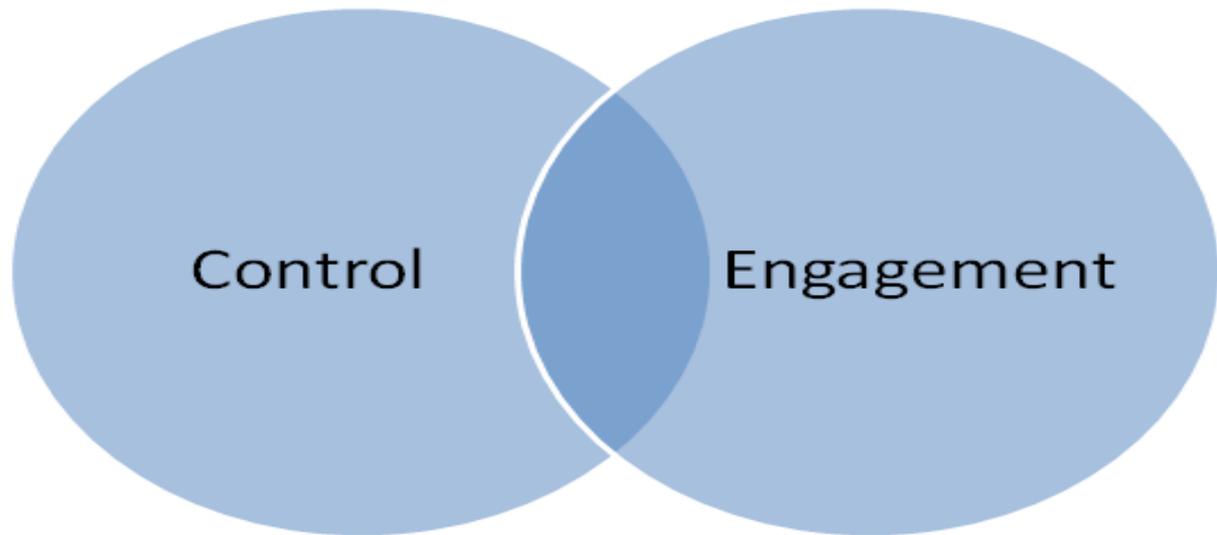


Classroom Management Activity

- In your group, place the post-its on the Control/Engagement Venn Diagram.



Classroom Management Activity



- With your group, choose a strategy used for Control and discuss how it can be modified for greater Engagement.



Classroom Management Key Concepts

- **Effective teachers . . .**
 - maximize instructional time.
 - ensure smooth transitions.
 - maintain momentum.
 - limit disruptions.

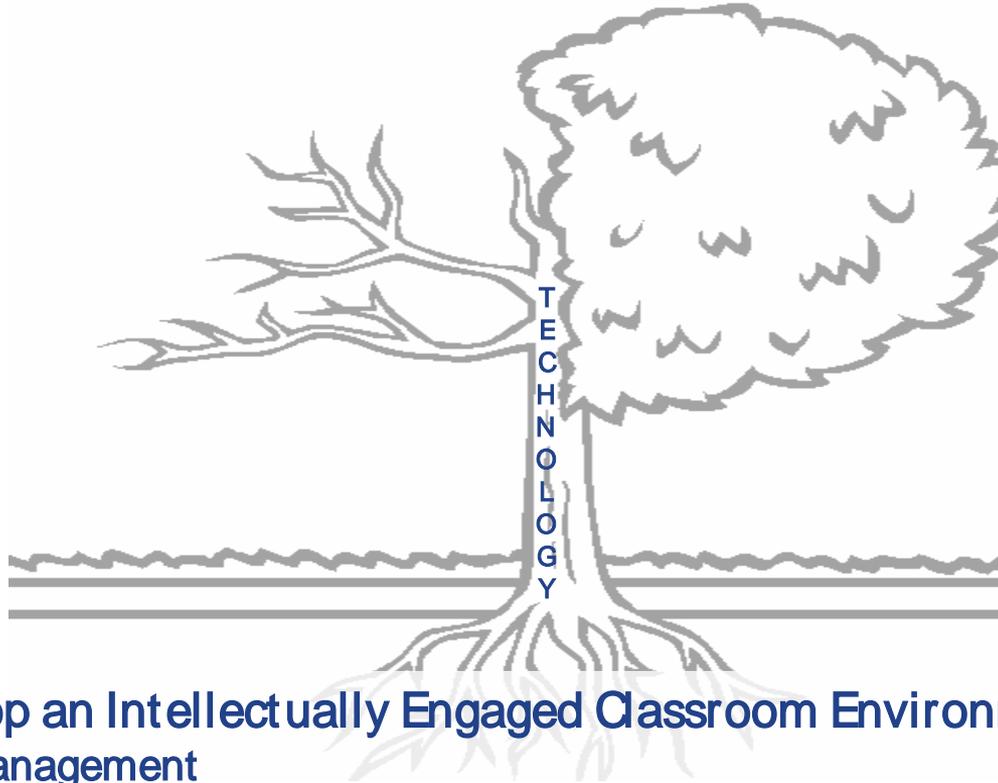


Planning

Essential Questions:

How can effective planning, establishing routines, and infusing technology support an intellectually engaged classroom?

Fostering Intellectual Engagement



Develop an Intellectually Engaged Classroom Environment

- Management
- Planning



Planning Research

Effective teachers plan for intellectual engagement by identifying **clear lesson and learning objectives**, and carefully linking activities to them that engage students **based on their needs**.



Planning Activity

Grade One Reading

What is the teacher doing?

What are the students doing?

What else do you notice? (materials, resources, use of space and time, etc.)



Planning Activity

- Using your video guide, share what you noticed with a partner.

Share with whole group:

- What evidence do you have that the students were engaged?
- What did the teacher do to make this happen?

Planning Activity

Active Engagement: Teacher will continue to read the nonfiction book up to a part containing another interesting fact that students would react to on page 21 of the Penguins! book. Teacher will note that the pictures also teach us information and make sure to show the picture of the mom penguin regurgitating food into the chicks mouth.

Turn and talk: What was the interesting fact? How did you react? Why?

Students will tell their reaction with their whisper buddy, explain why they had that reaction, and what new information they learned.

*During independent reading, students will mark up their books with the post-its.

*During independent reading, teacher will construct a guided reading group "reading train" on the rug. Teacher wears a conferring crown during the guided group so other students know not to interrupt.

*Teacher will gather readers attention with a Whole Brain Teaching chant. Teacher will restate the objective/goal.

*Students will meet with their reading partners. During partner reading, partners will share their post-its with their reactions and discuss why they felt that way. Students will ask questions, predict, connect, and discuss the facts.

*During partner reading, teacher will circulate to confer with students.

*Teacher will gather readers attention with another Whole Brain Teaching chant. Students will choose 1 post-it to place up on the post-it board to share.



Planning Key Concepts

- **Lesson plans which foster intellectual engagement have:**
 - clear student objectives.
 - organized content presentation that include student activities.
 - selected curriculum resources that reflect the objectives and student characteristics.
 - prepared questions to check for understanding and extend the learning opportunities.

Planning Key Concepts

- **Effective lesson plans include the following:**

- 
- Objective
 - Teacher activities
 - Student activities
 - Materials and resources
 - Assessment strategy

Notice, the educator used past assessment data to tailor her objectives, activities, and materials to meet the needs of her students. This is key to enhancing engagement.



Planning Application

- Consider a recent lesson plan.
- Identify routines and student activities which foster intellectual engagement.
- What could you add to your lesson plan to foster greater intellectual engagement?



Reflection: Management and Planning

Restate what you learned on Today's Meet:

What role does each play when creating an intellectually engaged classroom?

Select one:

- ✓ classroom management
- ✓ planning
- ✓ technology tools





Key Takeaways

- **Management**

- Routines allow for engagement as teacher and students must share ownership in maintaining control to maximize engagement

- Technology may facilitate management strategies from control to engagement

- Management is not limited to the environment inside the classroom

- **Planning**

- The planning phase begins the transformation from teacher-led to student-led classrooms

- Planning for intellectual engagement establishes teachers as facilitators of student learning

- Effective teachers recognize the various needs of their students and plan for engagement based on those needs.



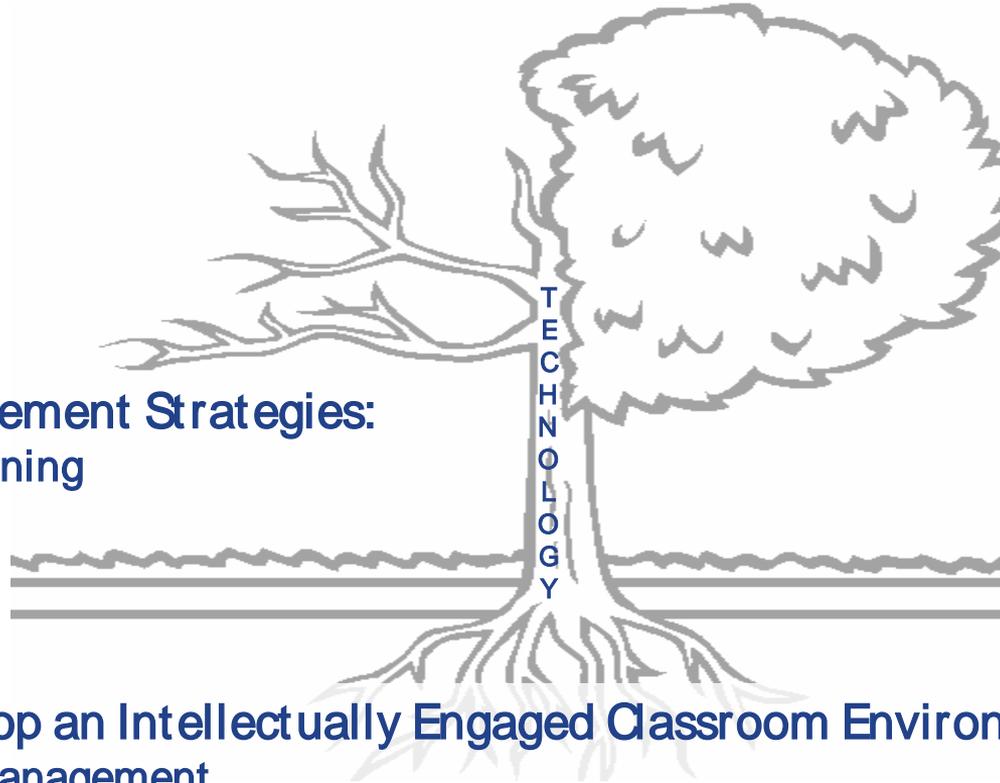
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- FOUNDATION FOR ENGAGEMENT
- CORE ENGAGEMENT STRATEGIES
- ENHANCING ENGAGEMENT

Fostering Intellectual Engagement

Core Engagement Strategies:

- Questioning



Develop an Intellectually Engaged Classroom Environment

- Management
- Planning



Questions

Essential Question:

How can high quality questions
create a high quality
opportunity for learning?



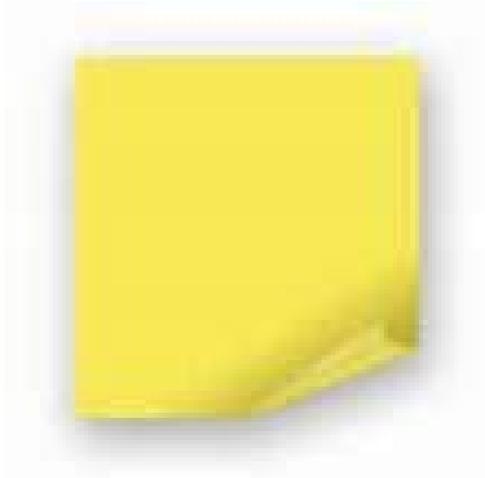
Questions Research

How do high quality questions promote learning?

- Stimulate thinking
- Clarify understanding
- Reveal misconceptions
- Deepen understanding
- Hear alternate views
- Make connections



Questions Activity



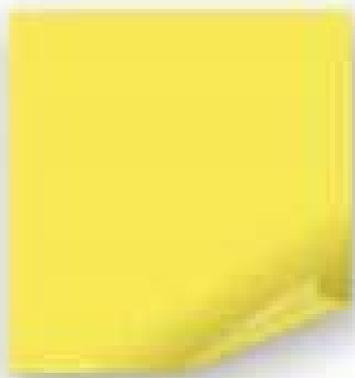
- On separate Post-its, write 5 to 7 **questions that you hear in the video.**

Questions



Questions Activity

Affinity Protocol:



- With your group, place all of your Post-its on the wall.
- Sort all of the questions that you collected by only moving your Post-its. (No talking!)
- Share how you sorted them in your group.
- Share out with whole group.



Questions Activity

- **Possible ways to categorize questions**
 - Low level/high level
 - Open/closed
 - Teacher/student
 - Divergent/convergent
 - Google/good



Questions Key Concepts

Questions need to be purposeful.

Intellectual engagement requires a mix of questions, beginning with **lower level, teacher-created, convergent, Google-type questions for management and assessment . . .**



Questions Key Concepts

... and leading towards **open ended, higher-order, divergent questions** which **cause** engagement and learning because they require ***discussion, research, and evidence*** to support the answer.



Questions Activity

Question Creation Chart (Q Chart)

	Is	Did	Can	Would	Will	Might
Who						
What						
Where						
When						
How						
Why						

Create questions by using one word from the left had column and one word from the top row. The further down and to the right you go, the more complex and higher level the question.



Questions Activity

- **Write three questions using the chart, and identify the purpose of the question.**
 - Management
 - Assessment
 - Engagement & Learning





Questions Activity

Examples of questions with different purposes:

Management

- How do we move into groups?
- Who is the time-keeper?
- Who gathers the painting supplies for this week's project?

Assessment

- What is the capital of China?
- Who is the main character?
- When would photosynthesis occur?
- How many players can be on the court during a volleyball game?



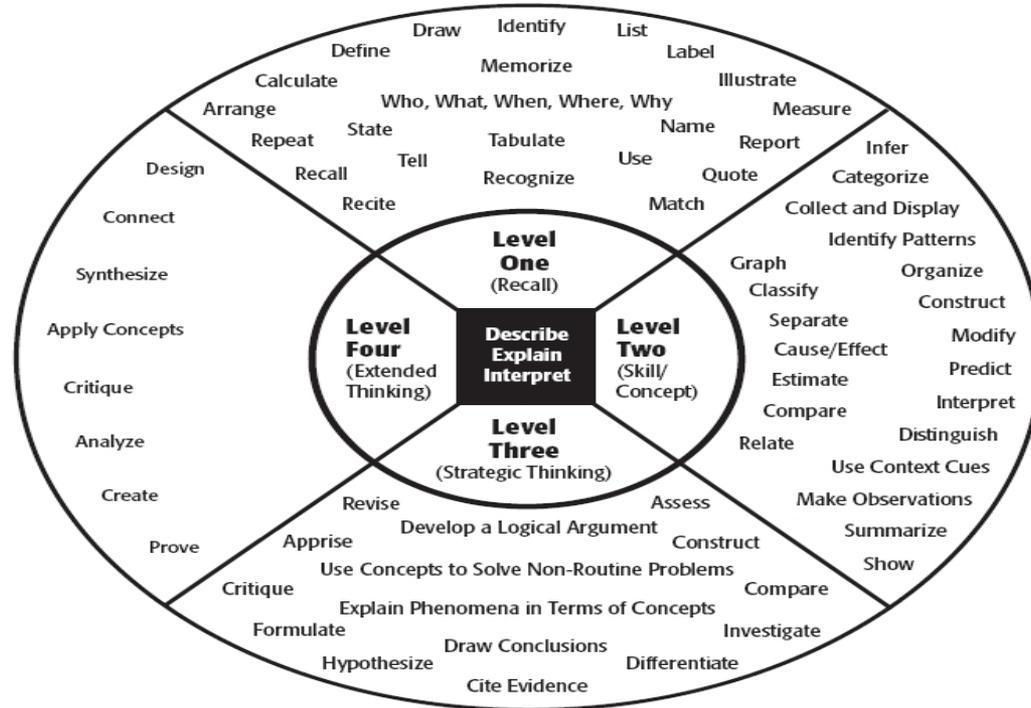
Questions Activity

Examples of questions with different purposes:

Cause engagement & learning

- Where did we use this concept before?
- How might this impact the future?
- Why do you multiply by the reciprocal when dividing fractions?
- How will you support your thesis statement?
- How might you modify your rocket design to increase distance traveled?
- Why might you choose a current arrangement of a musical piece as opposed to an original composition?

Depth of Knowledge and Questioning



Webb's Depth of Knowledge Guide



The Basics of Webb's DOK

- **Used to determine level of rigor based on cognitive complexity:**

- Considers “complexity” versus “difficulty” of task or question.
- Identifies thinking level required to produce acceptable responses.
- What cognitive processes are demanded by the task/question as outlined by the objective of the task/question?
- Does the DOK level of question match the complexity of the response?
- In other words, are the students engaging at the required DOK level of questioning?

Depth of Knowledge and Questioning

Level One

Who fought in the Civil War?

Level Two

How were Union soldiers similar to Confederate soldiers?

Level Three

What evidence supports the South having the right to secede from the United States?

Level Four

What do you feel the long term impact of the Civil War will be on the United States?



Reflection: Questions

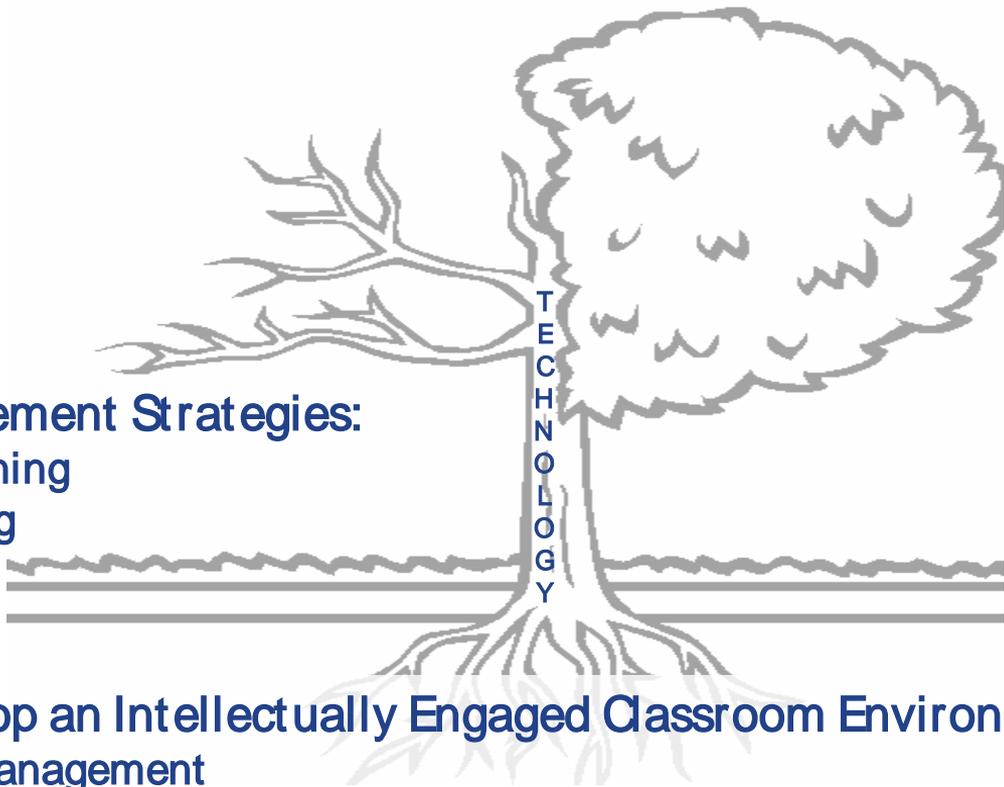
Remember and relate to your experience on Today's Meet:

Recalling a previous lesson, how can you enhance your questioning techniques to foster intellectual engagement?





Fostering Intellectual Engagement



Core Engagement Strategies:

- Questioning
- Grouping

Develop an Intellectually Engaged Classroom Environment

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Instructional Groups

Essential Question:

How can using appropriate instructional groups support intellectual engagement and facilitate student-centered discussion?



Instructional Groups Research

- Working with a small group provides “high quality,” intensive instruction appropriate for every member of the group. (Fountas and Pinnell, 2001)
- Teachers challenge all learners by providing instruction at varied levels of difficulty based on needs by using instructional groups. (Tomlinson, 2000)
- Cooperative group work results in increased self esteem, improved relationships among students, and increased social and educational skills. (Gillies, 2008)
- The most powerful single modification that enhances achievement is feedback through small group instruction. (Hattie, 1992)
- By intentionally incorporating the elements of positive interdependence and individual accountability, teachers set the stage for students to be responsible for their own learning; the learning of those in their group; and the ability to demonstrate what they know, understand, and are able to do.(McRel, 2012)

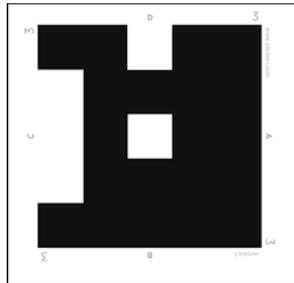


Plickers



Plickers is a free tech tool that we will use to foster critical thinking about engagement. You need to create an account online and get the app on a mobile device.

Rotate your Plicker symbol to indicate a response to 3 questions: A, B, C, or D.





Instructional Groups Activity

Instructional Groups

What is the teacher doing?

What are the students doing?

What else do you notice? (materials, resources, use of space and time, etc.)



Instructional Groups Activity

- After watching the videos and taking notes, what characteristics were necessary for the groups to work?
- Use **Silent Discussion Protocol** to share with your group. Use words, pictures, or phrases to write one thing you noticed on the chart paper. When prompted, turn chart paper, read and write more. Continue until you are back to your initial comment.



Instructional Groups Activity

Planning for Groups

- Visible characteristics for success
- Invisible characteristics for success

Instructional Groups Key Concepts

- **Visible characteristics for success**
 - Defined meeting space
 - Organized and available materials
 - Routines established



Give thoughtful feedback
Respect others & their thoughts
On task all the time
Use soft voices
Participate actively
Stay with your group



Instructional Groups Key Concepts

Invisible characteristics for success

- data used in planning
- used at appropriate times in unit
- used often enough, but not every day
- self-assessment or teacher assessment is included



Instructional Groups Key Concepts

Grouping patterns

- Turn and talk (random)
- Turn and talk (partners chosen by teacher)
- Small groups (low structure)
- Differentiated groups – assessment/data based



Student-Centered Discussion

"I never teach my pupils; I only attempt to provide the conditions in which they can learn." -- Albert Einstein

Learning is an interactive process between the student, the teacher, and the subject matter. Learning is enabled by a teaching approach. A well thought out teaching approach serves to motivate students' desire to learn, empowers students to think about the subject matter on their own, and helps the teacher create a learning environment that is developmentally appropriate. Such a teaching approach enables students and the teacher to take part in the learning process as co-thinkers.

- Highlight or underline 5 key words or phrases from the quote.
- With a partner, volley back and forth sharing a key word or phrase.

<http://www.interactivityfoundation.org/wp-content/uploads/2009/12/Guidebook-for-Student-Centered-Classroom-Discussions.pdf>



Teacher Led vs. Student Led Discussion

	<u>Teacher Led Discussion</u>	<u>Student Centered Discussions</u>
Discussion Interaction	Teacher to Student	Student to Student
Role of Teacher	Control Discussion Flow Serves as Expert	Assess Student Discussion Mentor Students
Content Understanding	Externally Driven by Teacher	Internally Driven by Students
Teacher Role	Content Expert	Student Development Mentor
Student Role	Listening Note Taking	Discussing Developing



Student-Centered Discussion

- **Fishbowl- Do Now:**

- **Read** the handout, “Keys to Effective Student-Centered Discussion” highlighting and annotating addressing the fishbowl questions in preparation for today’s fishbowl:

What are the keys to effective student-centered discussion?

Which component do you feel is most crucial for success?



Fishbowl Protocol

- **Inside circle:** Four “fish” in a bowl
- Will assume the roles of facilitator, time-keeper, presenter, and encourager.
- **Outside Circle:** Observers are **listening** in on the conversation - **not** carrying on their **own** conversation
- Consider the discussion questions, but feel free to take the discussion where you want to go!



Reflection: Student-Centered Discussion

React with your opinion via Today's Meet:

What instructional grouping tools/protocols will work to enhance student-led discussions in your classroom?





Key Takeaways

- **Questions**

The purposes of questions are to design ways to engage students in the instructional process.

Teachers need to determine how students will demonstrate engagement at the appropriate DOK level of rigor.

Teachers need to scaffold questioning to achieve their desired learning outcomes.

- **Groups**

Planning for groups involves a mix of visible and invisible characteristics to ensure effectiveness.

Group roles need to be well defined, practiced, and expectations need promote intrinsic and extrinsic accountability.

Well-designed student-led discussion allows students to assume the roles of mentor, coach, and facilitator.

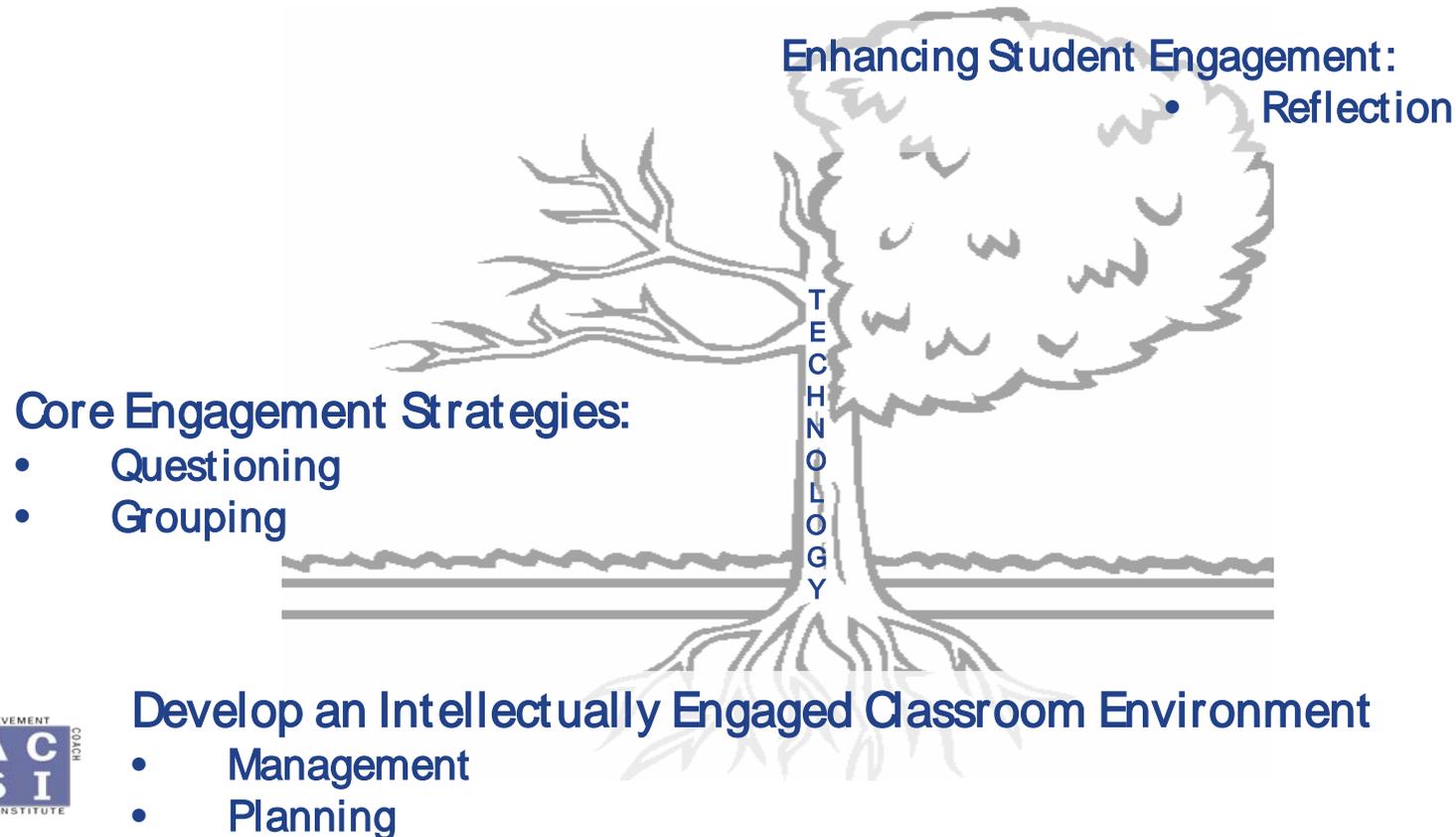


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Fostering Intellectual Engagement





Reflection

Essential Question:

What role does reflection play in the learning process?



Reflection Research

Reflection makes learners ponder and think recursively.

4 R's of Reflecting:

- **Restate** - what did you learn
- **React** - what is your opinion
- **Remember** - relate to your experience
- **Respond** - with a question



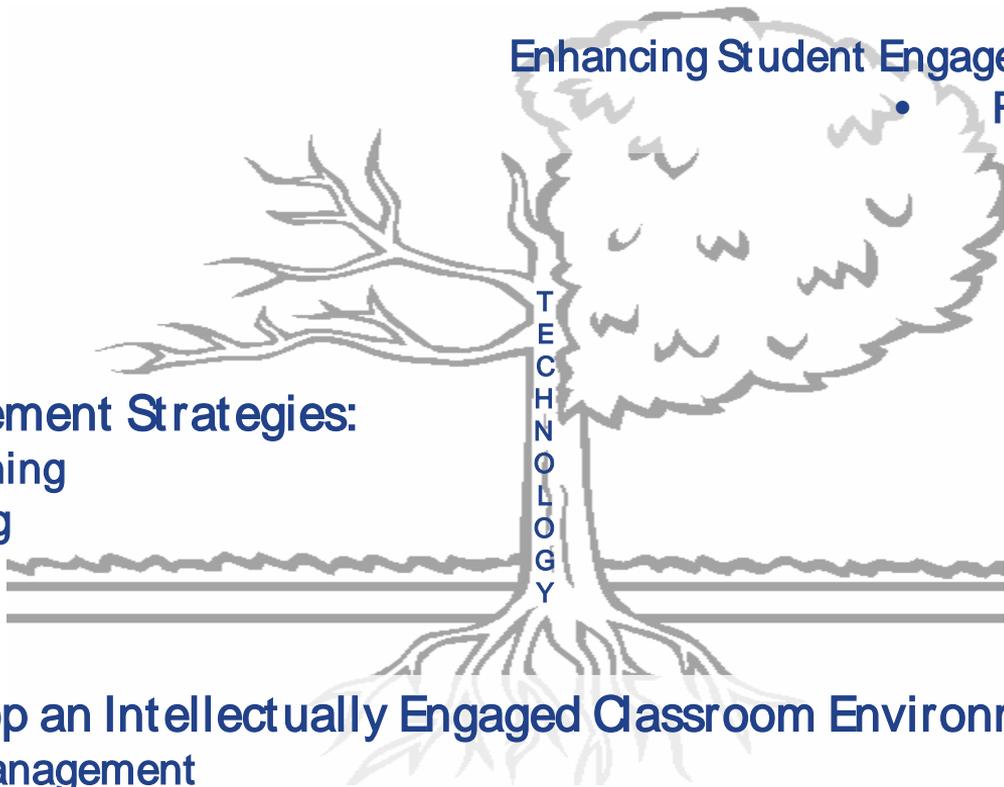
Reflection Key Concepts

Reflection is:

- a recursive revisiting of what was learned.
- an opportunity to examine what was learned from a new perspective or to add another layer to what was learned.
- an invitation for learners to think critically or metacognitively.
- often what “cements” or clarifies learning.



Fostering Intellectual Engagement



Enhancing Student Engagement:
• Reflection

Core Engagement Strategies:

- Questioning
- Grouping

Develop an Intellectually Engaged Classroom Environment

- Management
- Planning



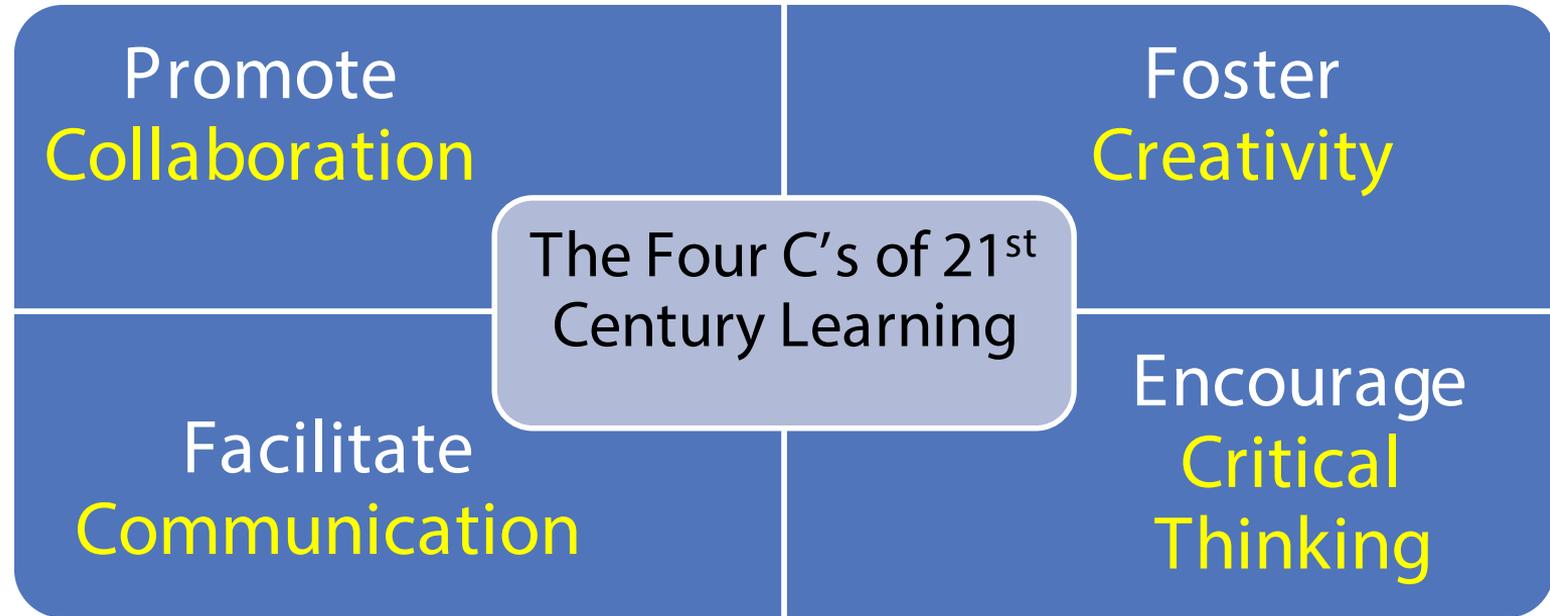
Technology

Essential Question:

Specifically how does technology enhance the learning process?



Reasons for Technology Integration



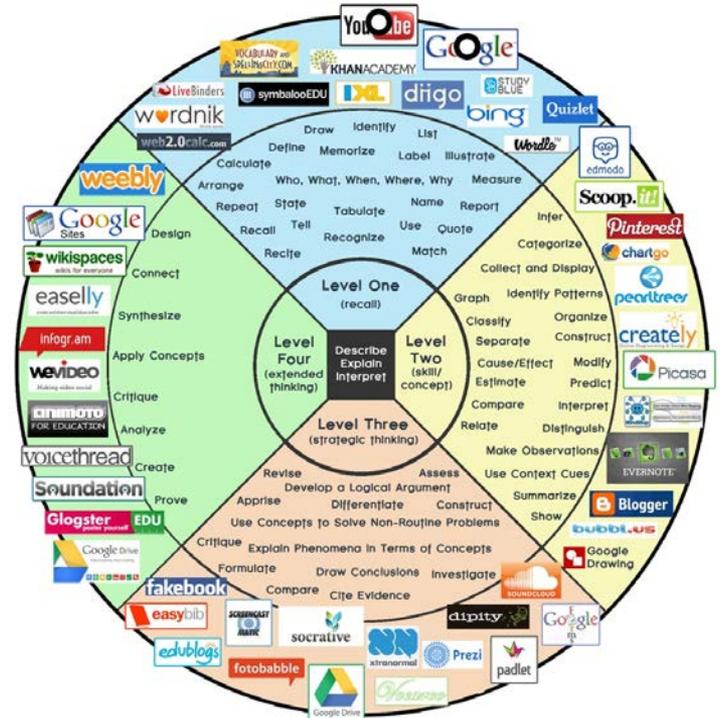
What is the relationship between technology in the classroom and "the four C's" of 21st century learning?

Depth of Knowledge and Technology

Webb's Depth of Knowledge & Web 2.0

Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Use Quizlet to 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 using web2.0calc	Use context cues to identify the meanings 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 in Google Drive	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 behaviors	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	

Webb, Norman L. and others. "Web Alignment Tool." 24 July 2005. Wisconsin Center of Educational Research, University of Wisconsin-Madison. 2 Feb. 2006. <http://www.wcer.wisc.edu/NOI/align.htm>





Technology for Intellectual Engagement

Watch this Video

[Using Technology to Increase Intellectual Engagement](#)

-Clearview Regional Media Production

- What resonates with you?





Technology Key Concepts

- **Technology in the classroom supports engagement, assessment, and differentiation.**
(Examples: Today's Meet, Socrative, Google Forms)
- **Technology outside the classroom supports on-going learning.**
(Examples: Google Docs, Online classrooms such as Moodle, Google Classroom and Canvas, Edmodo, Weebly, Twitter, YouTube, Instagram)
- **Use what is permitted as there is plenty to choose from.**
(Examples: Plickers, Kahoot, Remind, Padlet)



Reflection: Technology Success Story

Remember and relate via Today's Meet:

Share an experience when a tech tool facilitated one of the 4 C's.

Include:

- ✓ Grade level
- ✓ Tech tool
- ✓ Lesson objective
- ✓ The "C" factor (Collaboration, Communication, Creativity, or Critical Thinking)





Key Takeaways

- **Technology**

Technology provides a platform for continuous learning and reflection.

Technology fosters collaboration among teachers and students.

Technology resources align with a variety of learning styles that can guide planning for instruction and assessment.

- **Reflection**

Reflection can deepen students' engagement and help internalize the learning.

Reflection can be a pathway to setting learning goals.

Reflection promotes self-evaluation for students and teachers.

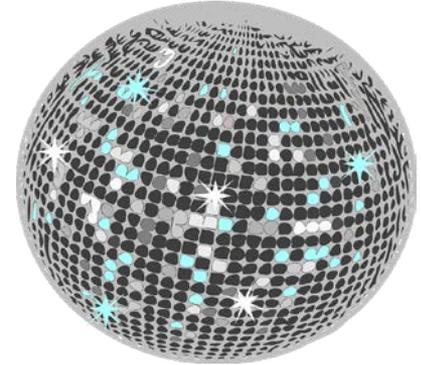


Get ready to...

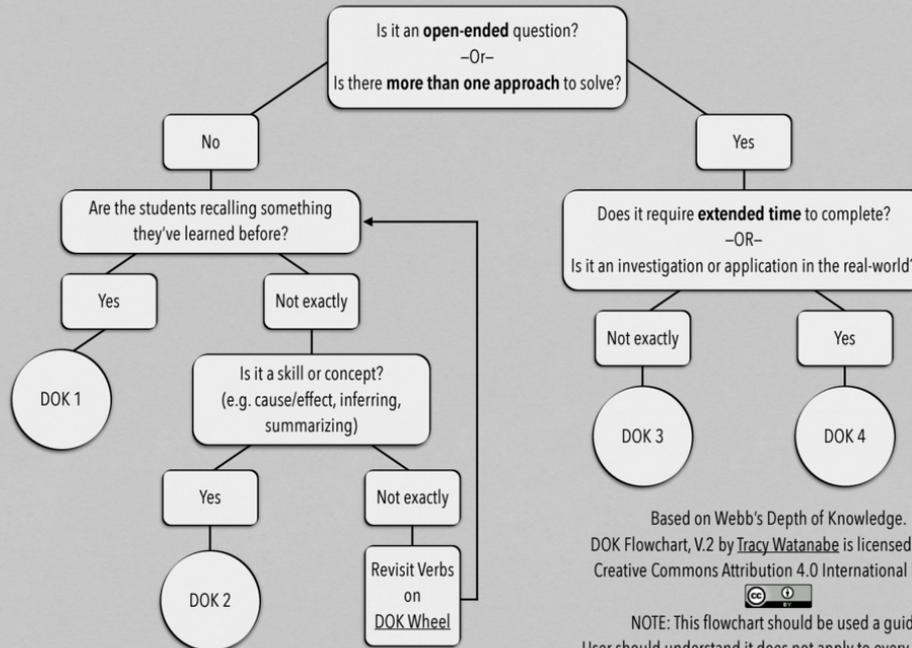
Disco-flect!



What's your big takeaway from DOK?



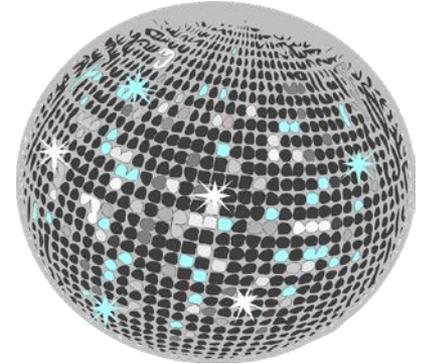
Depth of Knowledge (DOK) Flowchart for Questions



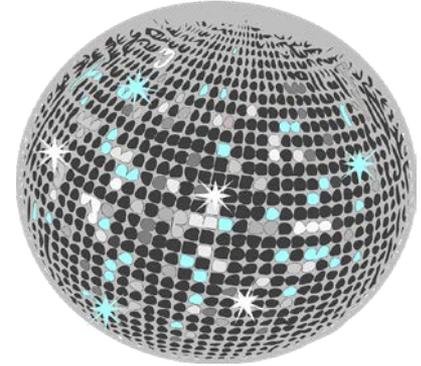


What is one protocol that you will use in your classroom? Why and how?

- Traffic light
- Post-it
- Affinity
- Silent Discussion
- Fishbowl
- Wow and Wonder
- VIP Word/Phrase
- “I had that”
- Volley share out



Boogie on back...



Homework for the break:

Share on social media about your enthusiasm!

#ACSI2016





Module Closure

Respond to the module with a question on a Post-it as an exit ticket:

Consider your turnkey presentation of this module in your district. Write a related question you want to see addressed in Part 2: Preparing to Turnkey the Module.



Final Closure

**Now that you set
a goal, make it
stick!**



No goal: 0%

Set a goal: 20%

Write it down: 35%

Accountability Partner: 51%

Specific Action Steps: 86%



SMART Goal

**Set a SMART Goal
for your practice**

Specific
Measurable
Action-Oriented
Realistic
Time-bound