TEACHER PRACTICE: FOSTERING INTELLECTUAL ENGAGEMENT
Introduction

Traffic Light Protocol

- Usually
- 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.
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*
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
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.

<table>
<thead>
<tr>
<th>Danielson</th>
<th>Marshall</th>
<th>Marzano</th>
<th>McREL</th>
<th>Stronge</th>
</tr>
</thead>
<tbody>
<tr>
<td>3c</td>
<td>A.G C.G</td>
<td>DQ: 5</td>
<td>Standard IV</td>
<td>Performance Standard 3</td>
</tr>
</tbody>
</table>

This crosswalk includes the most commonly selected (but not all) NJ DOE- approved instruments.
Additionally, these frameworks all point to student-leadership in lessons as evidence of effective instruction throughout their domains.
Fostering Intellectual Engagement

Core Engagement Strategies:
• Questioning
• Grouping

Enhancing Student Engagement:
• Reflection

Develop an Intellectually Engaged Classroom Environment
• Management
• Planning
Today’s Agenda

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

- **Collect**
- **Plan**
- **Implement**
- **Analyze**

Using Assessment Data to Drive Instruction

Fostering Intellectual Engagement

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
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.
• 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
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 - 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.
• 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?
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.
Today’s Agenda

• INTRODUCTION AND FRAMING

• FOUNDATION FOR ENGAGEMENT

• CORE ENGAGEMENT STRATEGIES

• ENHANCING ENGAGEMENT
Fostering Intellectual Engagement

Core Engagement Strategies:
• Questioning

Develop an Intellectually Engaged Classroom Environment
• Management
• Planning
Essential Question:

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

• Stimulate thinking
• Clarify understanding
• Reveal misconceptions
• Deepen understanding
• Hear alternate views
• Make connections
On separate Post-its, write 5 to 7 questions that you hear in the video.

Questions
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 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 . . .
... 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.
## Question Creation Chart

(Q Chart)

<table>
<thead>
<tr>
<th></th>
<th>Is</th>
<th>Did</th>
<th>Can</th>
<th>Would</th>
<th>Will</th>
<th>Might</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Why</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Create questions by using one word from the left-hand 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?
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?
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
- Management
- Planning
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 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**

<table>
<thead>
<tr>
<th>What is the teacher doing?</th>
<th>What are the students doing?</th>
<th>What else do you notice? (materials, resources, use of space and time, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• 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.
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
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
Grouping patterns

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

## Teacher Led vs. Student Led Discussion

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

Copyright 2008. Interactivity Foundation (all rights reserved).
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!
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.
Today’s Agenda

• INTRODUCTION

• FOUNDATION FOR ENGAGEMENT

• CORE ENGAGEMENT STRATEGIES

• ENHANCING ENGAGEMENT
Fostering Intellectual Engagement

Core Engagement Strategies:
• Questioning
• Grouping

Enhancing Student Engagement:
• Reflection

Develop an Intellectually Engaged Classroom Environment
• Management
• Planning
Essential Question:
What role does reflection play in the learning process?
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

Core Engagement Strategies:
- Questioning
- Grouping

Enhancing Student Engagement:
- Reflection

Develop an Intellectually Engaged Classroom Environment
- Management
- Planning
Essential Question:
Specifically how does technology enhance the learning process?
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
Write each tech tool in your current repertoire on a Post-it

Collate your Post-its with the whole group

Sort and label using the 4 C’s

Use “Epic BYOD Toolchest” as a reference
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)
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

Is it an open-ended question?
- Or -
Is there more than one approach to solve?

No

Are the students recalling something they’ve learned before?

Yes

DOK 1

Not exactly

Is it a skill or concept? (e.g. cause/effect, inferring, summarizing)

Yes

DOK 2

Not exactly

Revisit Verbs on DOK Wheel

Yes

Does it require extended time to complete?
- Or -
Is it an investigation or application in the real-world?

No

Not exactly

DOK 3

Yes

DOK 4

Based on Webb’s Depth of Knowledge. DOK Flowchart, V2 by Tracy Watanabe is licensed under a Creative Commons Attribution 4.0 International License.

NOTE: This flowchart should be used a guide. User should understand it does not apply to every question.
Which technology resource will you use in your classroom?
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.
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