Establishing a Common Vocabulary:
Rigor, Relevance, and Relationships

Session #45
Linda Jordan
Agenda

- Welcome & Introductions
- Relationships
- Relevance
- Rigor
- Closing
Holland, Michigan
My Credentials

Senior Implementation Advisor
The International Center for Leadership in Education
Building Relationships
Building Relationships
All We Have In Common

With the people sitting near you form a group of 3-5

Create a list of at least three things you have in common.

Be ready to share some items from your list with the group.
Learning Outcomes

Understand how rigor, relevance, and relationships support the foundations of effective instruction

Begin applying the tools aligned with rigor and relevance to create a more engaging learning environment
Building a Systemwide Approach for Rigorous Learning
## Comparing Models

<table>
<thead>
<tr>
<th>Traditional Teaching Frameworks</th>
<th>DSEI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What teachers should do</strong></td>
<td><strong>What the entire system should do</strong></td>
</tr>
<tr>
<td>Teacher-focused</td>
<td>Student-focused</td>
</tr>
<tr>
<td>Teachers deliver instruction</td>
<td>Teachers facilitate learning</td>
</tr>
<tr>
<td>Vision is set by top leaders</td>
<td>Vision is built more inclusively</td>
</tr>
<tr>
<td>Define vision primarily in terms of academic measures</td>
<td>Define vision as strong academic and then personal skills and the ability to apply them</td>
</tr>
<tr>
<td>Rigid structures support adult needs</td>
<td>Flexible structures support student needs</td>
</tr>
<tr>
<td>Focus on teaching</td>
<td>Focus on learning</td>
</tr>
</tbody>
</table>
Is Your System Aligned?

Strengths

Challenges
The Third R: RELATIONSHIPS
Relationships Make Relevance Possible
A Focus on Relationships

Teacher → Student → Student → Teacher

International Center for Leadership in Education

HMH
Critical Relationships
Critical Relationships

Teacher Administration

School Parents

School Community
The human brain is hardwired to give and receive care.
Relationships

• increase feelings of safety, motivation and risk-taking

• can enhance learning

• need to be in place to build the safety need to use higher order thinking (rigor)
Relationship Resources

Search these keywords:

Teambuilding
Inclusion Activities
Energizers
How Do You Build Relationships?

- What is the culture of your schools?
- Bus drop-off/pick-up
- Café
- Hallways
- Office
Learner Engagement Indicators

- Active Participation
- Learning Environment
- Formative Assessment and Tools
Engagement Characteristics

- Positive body language
- Consistent focus
- Verbal participation
- Confidence
- Sense of fun and excitement
- Comfort seeking help and getting individual attention
- Can clearly describe learning

- Find the work meaningful, relevant, and connected
- Work on rigorous learning, complex problems, and issues
- Can explain what high-quality work looks like and how his or her work compares
- Can set and meet personal goals
Engagement is Critical for Great Relationships

Which engagement characteristics do your students exhibit consistently in every classroom?

THINK → PAIR → SHARE
Culture

“Culture is the set of habits that allows a group of people to cooperate by assumption rather than by negotiation.” - Ray McNulty, Senior Fellow, ICLE

ESSENTIAL QUESTIONS

- Do we trust each other?
- What does disagreement mean at our school?
- Who owns school performance?
A Successful Culture

Includes:

- **Accountability** — to each other and ourselves
- **Ownership** — of the outcomes
- **Commitment** — to achieving more each day
- **Belief** — that anything is possible if we work together.
- **Will** — to continue pressing forward when change gets difficult.
Culture Trumps Strategy

“Culture eats strategies for breakfast.”
Peter Drucker, Management Consultant, Educator, Author

“Almost everyone wants schools to be better, but fewer want schools to be different.”
Ray McNulty, Senior Fellow, ICLE

“If you attempt to implement reforms but fail to engage the culture of a school, nothing will change.”
Seymour Sarason, School Reform Researcher
Relationships

Love your students more than you love your subject!
With Relationships in Place and Relevancy Established, Rigor Can Be Achieved.
Defining Rigor

- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering

Knowledge Taxonomy:
- 1: Remembering
- 2: Understanding
- 3: Applying
- 4: Analyzing
- 5: Evaluating
- 6: Creating

Application Model:
- Application
- Assimilation
- Adaptation

Knowledge in one discipline
Apply in discipline
Apply across disciplines
Apply to real-world predictable situations
Apply to real-world unpredictable situations
How Do You Define Rigor?

What makes a lesson rigorous for students?

- Definition
- Aspects of a Rigorous Lesson
- Examples
- Non-examples
Rigor Is:

• Scaffolding student thinking
• Planning for student thinking
• Assessing student thinking about content
• Recognizing the level of thinking students demonstrate
• Managing the teaching/learning level for the desired thinking level for each student
Rigor Is Not:

• More or harder worksheets
• AP or honors courses
• The higher level book in reading
• More classwork
• More homework
Rigor Makes the Future Possible
Rigor Indicators

- Thoughtful Work
- High-Level Questioning
- Academic Discussion
Rigorous Learning

Means Framing Lessons at the High End of the Knowledge Taxonomy

- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering
Bloom’s Taxonomy

**Original**
- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Eval

**Revised**
- Remembering
- Understanding
- Applying
- Analyzing
- Evaluating
- Creating

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Integrating Technology

Bloom’s Taxonomy—Technology Version

educationaltechnologyguy.blogspot.com
Ways to Increase Rigor

Create challenging problems for them to solve

Writing and thinking as a measure of thinking

Sharing clear examples

Questions!!!
Relevance

Knowledge Taxonomy

Creating
Evaluating
Analyzing
Applying
Understanding
Remembering

Assimilation
Adaptation

Acquisition
Application

Application Model

Knowledge in one discipline
Apply in discipline
Apply across disciplines
Apply to real-world predictable situations
Apply to real-world unpredictable situations
How Do You Define Relevance?

What makes a lesson relevant for students?

<table>
<thead>
<tr>
<th>Definition</th>
<th>Aspects of a Rigorous Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
<td>Non-examples</td>
</tr>
</tbody>
</table>
What is Relevant to Today’s Students?

K-Born in 2011
6th Grade – Born in 2004
12th Grade – Born in 1998 (K-2003)

What have you experienced that they have NOT?
Relevance

Real World Application in Unanticipated Situations
A Relevant Lesson asks Students to:

Use their knowledge to tackle real-world problems that have more than one solution
Relevance: The Purpose of the Learning

ACQUIRE KNOWLEDGE

APPLY KNOWLEDGE

INTERDISCIPLINARY

REAL WORLD PREDICTABLE

REAL WORLD UNPREDICTABLE
Relevance Makes Rigor Possible

• Diverse learners respond well to relevant and contextual learning
  • This improves memory, both short term and long term

• Relevance must be student based: the student’s life, the students family and friends, the student’s community, the world today, current events, etc.
Relevance Indicators

- Meaningful Work
- Authentic Resources
- Learning Connections
## Adding Relevance to Any Lesson or Unit

<table>
<thead>
<tr>
<th>Comparing Learning to:</th>
<th>Use the Real World:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral, ethical, political, cultural points of view, and dilemmas</td>
<td>Student’s life</td>
</tr>
<tr>
<td>Real world materials</td>
<td>Student’s community and friends</td>
</tr>
<tr>
<td>Internet resources</td>
<td>Our world, nation, state</td>
</tr>
<tr>
<td>Video and other media</td>
<td>World of work</td>
</tr>
<tr>
<td>Scenarios, real life stories</td>
<td>World of service</td>
</tr>
<tr>
<td>News - periodicals, media</td>
<td>World of business and commerce that we interact with</td>
</tr>
</tbody>
</table>
Rigorous Lessons Ask Students To:

- Compose
- Create
- Design
- Invent
- Predict
- Research

- Summarize
- Defend
- Compare
- Justify
If a lesson is relevant, students will be able to tell you:

- **What** They Learned
- **Why** They Learned It
- **How** They Will Use It

_The lesson will have meaning for students._
Rigorous and Relevant Learning is...

- Scaffolding thinking and doing
- Planning for thinking and doing
- Assessing thinking about content
- Recognizing the level of thinking students demonstrate
- Managing the teaching/learning level for the desired thinking level
Rigor/Relevance Framework

Know

Understand

A

B

C

D

1 2 3 4 5
Rigor/Relevance Framework

HIGH

RIGOR

C  Rigor Critical Thinking

Acquisition of knowledge / skills

B  Relevancy Validation

Motivation Creativity Innovation Problem Solving

RELEVANCE

HIGH
Rigor/Relevance Framework

- **Knowledge Taxonomy**
  - 1: Remembering
  - 2: Understanding
  - 3: Applying
  - 4: Analyzing
  - 5: Evaluating
  - 6: Creating

- **Application Model**
  - 1: Apply in one discipline
  - 2: Apply in discipline
  - 3: Apply across disciplines
  - 4: Apply to real-world predictable situations
  - 5: Apply to real-world unpredictable situations

- **Areas**
  - A: Student Works
  - B: Student Works and Thinks
  - C: Teacher Works
  - D: Student Thinks
Rigor/Relevance Framework

Knowledge Taxonomy

Application Model

Creating
Evaluating
Analyzing
Applying
Understanding
Remembering

Assimilation
Adaptation

Knowledge in one discipline
Apply in discipline
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HMH
Tools to Support a Rigorous and Relevant Learning Environment
## Verb List by Quadrant

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculate</td>
<td>Adjust</td>
<td>Analyze</td>
<td>Adapt</td>
</tr>
<tr>
<td>Choose</td>
<td>Apply</td>
<td>Categorize</td>
<td>Argue</td>
</tr>
<tr>
<td>Count</td>
<td>Build</td>
<td>Classify</td>
<td>Compose</td>
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<tr>
<td>Define</td>
<td>Collect</td>
<td>Compare</td>
<td>Conclude</td>
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<tr>
<td>Describe</td>
<td>Construct</td>
<td>Conclude</td>
<td>Create</td>
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<td>Find</td>
<td>Demonstrate</td>
<td>Contrast</td>
<td>Design</td>
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<tr>
<td>Identify</td>
<td>Display</td>
<td>Debate</td>
<td>Develop</td>
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<td>Label</td>
<td>Dramatize</td>
<td>Defend</td>
<td>Discover</td>
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<td>List</td>
<td>Draw</td>
<td>Diagram</td>
<td>Explore</td>
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<td>Locate</td>
<td>Fix</td>
<td>Differentiate</td>
<td>Formulate</td>
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<td>Follow</td>
<td>Discriminate</td>
<td>Generate</td>
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<td>Memorize</td>
<td>Illustrate</td>
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<td>Modify</td>
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<td>Point to</td>
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<td>Recall</td>
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<td>Predict</td>
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<td>Recite</td>
<td>Interview</td>
<td>Examine</td>
<td>Prioritize</td>
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<td>Record</td>
<td>Look up</td>
<td>Explain</td>
<td>Propose</td>
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<td>Say</td>
<td>Maintain</td>
<td>Express</td>
<td>Rate</td>
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<td>Select</td>
<td>Make</td>
<td>Generate</td>
<td>Recommend</td>
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<td>Spell</td>
<td>Measure</td>
<td>Infer</td>
<td>Revise</td>
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<td>View</td>
<td>Operate</td>
<td>Judge</td>
<td>Teach</td>
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<td>Play</td>
<td>Justify</td>
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<td></td>
<td>Practice</td>
<td>Prove</td>
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<td></td>
<td>Produce</td>
<td>Research</td>
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<td>Relate</td>
<td>Study</td>
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<td>Role-play</td>
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<td>Sequence</td>
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</table>
# Student Work Products by Quadrant

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>Answer</td>
<td>Collage</td>
<td>Abstract</td>
<td>Adaptation</td>
</tr>
<tr>
<td>Definition</td>
<td>Collection</td>
<td>Annotation</td>
<td>Blueprint</td>
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<tr>
<td>Explanation</td>
<td>Data</td>
<td>Blog</td>
<td>Book</td>
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<tr>
<td>List</td>
<td>Demonstration</td>
<td>Chart</td>
<td>Brochure</td>
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<td>Quiz</td>
<td>Interpretation</td>
<td>Debate</td>
<td>Debate</td>
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<td>Recitation</td>
<td>Notes</td>
<td>Essay</td>
<td>Device</td>
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<td>Reproduction</td>
<td>Painting</td>
<td>Evaluation</td>
<td>Editorial</td>
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<tr>
<td>Selection</td>
<td>Performance</td>
<td>Exhibit</td>
<td>Estimation</td>
</tr>
<tr>
<td>True/False</td>
<td>Service</td>
<td>Inventory</td>
<td>Game</td>
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<td>Worksheet</td>
<td>Skit</td>
<td>Solution</td>
<td>Invention</td>
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<td></td>
<td>Survey</td>
<td>Investigation</td>
<td>Lesson</td>
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<td></td>
<td>Theatre Set</td>
<td>Journal</td>
<td>Model</td>
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<td>Newspaper</td>
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<td>Play</td>
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<td>Poem</td>
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<td>Song</td>
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<td>Trial</td>
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<td>Video</td>
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<td>Website</td>
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<td>Wiki</td>
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</tbody>
</table>
Teacher Question Stems by Quadrant

**How are these similar/different?**
- How is this like…?
- What’s another way we could say/explain/express that?
- What do you think are some reasons/causes that…?
- Why did.....changes occur?
- What is a better solution to…?
- How would you defend your position about that?

**How would you design a…to …?**
- How would you compose a song about…?
- How would you rewrite the ending to the story?
- What would be different today, if that event occurred as…?
- Can you see a possible solution to…?
- How could you teach that to others?
- If you had access to all the resources, how would you deal with…?
- What new and unusual uses would you create for…?

**What is/are…?**
- How many…?
- How do/does…?
- What did you observe…?
- What else can you tell me about…?
- What does it mean…?
- What can you recall…?
- Where did you find that…?
- Who is/are…?
- How would you define that in your own terms?

**Would you do that?**
- Where will you use that knowledge?
- How does that relate to your experience?
- What observations relate to…?
- Where would you locate that information?
- How would you illustrate that?
- How would you interpret that?
- How would you collect that data?
- How do you know it works?
# Teacher Question Stems by Quadrant

<table>
<thead>
<tr>
<th>Routine</th>
<th>Quadrant A Acquisition</th>
<th>Quadrant B Application</th>
<th>Quadrant C Assimilation</th>
<th>Quadrant D Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choral Responses</td>
<td>**</td>
<td>**</td>
<td>*</td>
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<tr>
<td>Idea Wave</td>
<td>***</td>
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<td>**</td>
</tr>
<tr>
<td>Numbered Heads</td>
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</tr>
<tr>
<td>Show of Thumbs</td>
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<tr>
<td>Socratic Seminar</td>
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<tr>
<td>Think (Write)-Pair-Share</td>
<td>***</td>
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<tr>
<td>Response Frames</td>
<td>***</td>
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</tbody>
</table>
Linda, I created a new slide above for this – feel free to swap out the routines to any others you prefer.

<table>
<thead>
<tr>
<th>Routine</th>
<th>Quadrant A Acquisition</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Answers Up</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
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<tr>
<td>Choral Responses</td>
<td>★ ★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Give One—Get One</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★</td>
</tr>
<tr>
<td>Numbered Heads</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
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<tr>
<td>Partner and Group Interactions</td>
<td>★ ★</td>
<td>★ ★ ★</td>
<td>★</td>
<td>★ ★ ★</td>
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<tr>
<td>Pick and Point</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★</td>
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<tr>
<td>Purposeful Viewing</td>
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<td>★</td>
<td>★ ★</td>
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<td>Question Chains</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★ ★</td>
<td>★ ★ ★</td>
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<tr>
<td>Setting Up and Monitoring Tasks</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
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<tr>
<td>Show of Thumbs</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
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<tr>
<td>Socratic Seminar</td>
<td>★</td>
<td>★</td>
<td>★ ★ ★</td>
<td>★ ★ ★</td>
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<td>Think (Write)-Pair-Share</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★</td>
</tr>
<tr>
<td>Thumbs Up/Thumbs Down</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Turn and Talk</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★</td>
</tr>
<tr>
<td>Using Response Frames</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★</td>
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<tr>
<td>Write and Reveal</td>
<td>★ ★ ★</td>
<td>★ ★</td>
<td>★</td>
<td>★ ★</td>
</tr>
</tbody>
</table>
Application Model Decision Tree

Is it application?
  - NO → Level 1: Knowledge in one discipline
  - YES → Is the application real-world?
    - NO → Is more than one discipline involved?
      - NO → Level 2: Application in one discipline
      - YES → Level 3: Interdisciplinary application
    - YES → Is the outcome unpredictable?
      - NO → Level 4: Real-world predictable application
      - YES → Level 5: Real-world unpredictable application
Technology Use by Quadrant

Creating
Can the student create new product or point of view?

Evaluating
Can the student justify a stand or decision?

Analyzing
Can the student distinguish between the different parts?

Applying
Can the student use the information in a new way?

Understanding
Can the student explain ideas or concepts?

Remembering
Can the student recall or remember the information?

Knowledge
1. Remembering
2. Understanding
3. Applying
4. Evaluating
5. Analyzing
6. Creating

Products with Technology
- Programming
- Editing
- Monitoring
- Testing
- Hyperlinking
- Validating resources
- Media clipping/cropping
- Photos/video
- Reverse engineering
- Cracking
- Mashing-mixing/remixing
- Broadcasting
- Podcasting
- Composing – GarageBand
- Audio casting
- Digital storytelling
- Blog commenting
- Reviewing
- Collaborating
- Networking
- Directing
- Photo/video blogging
- Animating
- Modifying/game modding
- Applications
- Word Doc
- Bullets & lists
- Internet searching
- Highlighting selecting
- Creating & naming folders
- Using a mouse
- Typing
- Editing
- Loading
- Apply
- Sequence
- Demonstrate
- Interview
- Construct
- Solve
- Calculate
- Dramatize
- Interpret
- Illustrate
- Google docs
- Blogs
- Posting – social media
- Web authoring
- Advanced searching
- Tagging
- Subscribing to a RSS feed
- Annotating
- Replying – commenting
- Social bookmarking
- Texting
- Sharing
- Operating/running a program
- Hacking
- Uploading

Application
1. Knowledge in one discipline
2. Application within one discipline
3. Application across disciplines
4. Application to real-world predictable situations
5. Application to real-world unpredictable situations

Source: http://commoncore.fcoe.org/subject/technology
Rigor/Relevance Framework
Session Handouts

ModelSchoolsConference.com
Please Provide Session Feedback

Pick One:
• Paper (2 in bag)
• MSC App
• QR Code
• http://tinyurl.com/MSC16eval
Thank You

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