Teaching for Critical Thinking
Part 1
Diving in to Critical Thinking & Classroom Strategies
Brian Van Tassel
About me
Hand Raise Signal
In your table groups:

Introduce yourselves … and what you hope to learn today!
Today ...
i know...
What is “Critical Thinking”? 

*In groups of three:*

List specific skills / behaviors that students might do individually or collaboratively that would count as “critical thinking”

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<tr>
<th>Skills / behaviors</th>
<th>Example</th>
<th>Ranking</th>
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What is “Critical Thinking” / “Higher order thinking skills”?

Join two groups of three into a group of six
Share your ideas … and expand your list!
Then jot down a concrete example of each
e.g. explain how to add fractions

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Ranking Critical Thinking Skills

*Back in your groups of three*

Rank which ones are the most important

- By yourself
- Then as a group

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Thinking holistically about a Student with Critical Thinking Skills

HEAD: What goes on in their mind?
Thinking holistically about a Student with Critical Thinking Skills

**HEART**: Consider their attitudes and beliefs, and how thinking intersects with faith.
Thinking holistically about a Student with Critical Thinking Skills

**HANDS:** How might thinking translate into doing or serving?
Describing a Student with Critical Thinking Skills

With a partner: (3 mins)

What are some words that would describe a student who epitomizes Higher Order Thinking?

HEAD HEART HANDS
Facilitating Critical Thinking Skills

*Table Groups*

What are some strategies / design elements teachers can use to facilitate student critical thinking skills ... to make your classroom a place where critical thinking happens?

*Write large on poster paper*
Facilitating Critical Thinking Skills

Each table send out “spies” to gather ideas from other tables …

Bring back more strategies / design elements and add to your poster
Facilitating Critical Thinking Skills

*Table Groups*

Which strategies / design elements have you used and found effective? Share examples.

Which would you like to try?
Group Reflection

Think: Tables / Popcorn

How have we all used Critical Thinking so far during this workshop?
Group Reflection

Think: Tables / Popcorn

How has the workshop design effectively facilitated a Critical Thinking environment?

How would you describe the “presenter’s” role so far?
Principles / Techniques

Activating prior knowledge
Getting the Teacher Off the Stage
Tasks for the learners that are cognitively demanding [Who is doing the thinking?]
Carefully crafted questions
Engagement / Social Learning
Principles / Techniques

Think: Pair: Share

How might your thinking levels have been different if the “presenter” had used a lecture approach?
Principles / Techniques

Discuss these principles / techniques at Table Groups

Why might these work?
Which ones have I had success with in the past?
Which ones can I visualize myself trying?
Teacher’s Role ...

*In table groups*

Synthesizing what has been discussed so far:

**How would you describe the teacher’s primary role in a Critical Thinking rich classroom?**
Teacher’s Role … and Identity

Personal Reflection

“I am a facilitator of learning and growth” vs “I am a presenter of information”

How are these different?
Teacher’s Role … and Identity

Personal Reflection

How will I know when I have an identity of a “facilitator of learning & growth”?
Learning Goals - Part 1

1. Appreciate and describe the shift in identity needed for a teacher to facilitate student Critical Thinking most effectively
2. Recognize various Critical Thinking Skills
3. Understand and use a variety of strategies to promote student Critical Thinking
4. Describe students’ identity as learners who consistently use Critical Thinking Skills
3:2:1 Reflection

- What 3 things stand out to me?
- What are 2 questions I have?
- What is 1 thing I will put into practice next week?
Extra Activity (if time)

Think of a lesson (or unit) you recently taught.

What are one or two ways in which you could re-design that lesson (or unit) to increase the level of student Critical Thinking taking place during that lesson/unit?
Teaching for Critical Thinking
Part 2
4 Kinds of Critical Thinking in Classroom Activities, Assessments, and Planning
Brian Van Tassel
Learning Goals - Part 2

1. Understand four kinds of thinking; identify or create examples of learning experiences that involve these.

2. Understand (through experiencing and reflecting) a variety of strategies to promote student Critical Thinking.

3. Understand, identify and create alignment of thinking level between of learning goals and assessment approaches.
Metacognition

In Table Groups:

- What is Metacognition? Give some examples
- Discuss the examples in the Appendix on your notes sheets
4 kinds of Critical Thinking

(C) Convergent Thinking

(D) Divergent Thinking

(M) Metacognitive Thinking

(E) Engaged Thinking
C/D/M/E: Matching Activity

At Table groups: Use the cards that show kinds of Critical Thinking (Diagram), examples, definitions and blank cards:

1. Match each kind of Critical Thinking (C/D/M/E) (Diagram) with the example and definition that best fit.

2. Use the blank card to create your own example for each kind of thinking
C/D/M/E Hand Motions

C

D

M

E
C/D/M/E Mixer

1. Grab (or remember) one of the examples your group created on the Green paper

2. Find a partner from a different group and read your examples to each other

3. Identify your partner’s example using the hand motion for C, D, M, or E! If you disagree, share your rationale briefly.

4. Find another partner and repeat!
Reflection ...

In your table groups:
What Critical Thinking skills were involved in this activity?
When did you use C / D / M / E thinking during the activity?

What teaching strategies were effective?
Principles / Strategies / Roles:
Did you notice ...

- Learners using C/D/M/E in practice
- Learners Analyzing, Evaluating, Creating
- Real-world / Authentic
- Getting the teacher off the stage
Principles / Strategies / Roles:
Did you notice ...

- Teacher’s role - to facilitate
- Constructivism vs Instructivism
- Learners collaborating: discussing and questioning
- Freedom to explore / fail / develop mastery gradually in a safe, self-correcting environment: *Formative assessment*
Reflection

Table group:

What might be important about classroom culture to facilitate this kind of approach?
Reflection

Table group:

How is your understanding of teaching as “facilitating student learning and growth” developing?
More Reflection

What do you find intriguing so far?
What do you agree with / disagree with?
What do you have questions about?
What do you think you might like to try?
What enduring understanding is emerging for you?
Application

Choose One ONLY

1. **RE-DESIGN A LESSON**: Considering a lesson you recently taught, how might you modify it to facilitate more student Critical Thinking?

2. **IMPACTING YOUR SCHOOL**: What will you share with colleagues, and how will you share it in a way that embodies Critical Thinking principles?
Assessment Options

Consider these four possible assessments of your learning so far:

a. Write your own definitions of C / D / M / E thinking on an “exit slip”

b. Create a poster showing your definitions along with the best examples you created
Assessment

c. Design, teach, and videotape a lesson (which you will submit) to show that you understand and can implement C/D/M/E in the classroom … and also submit your own reflections on how successful the lesson was.
Assessment

d. [You suggest another way of assessing your learning about C/D/M/E …]

[Do this now … then add it to your notes sheet]
Analyzing Assessment Options

On your notes sheet ...

Column 2:
Decide what kinds of thinking would be involved in each kind of assessment.

- C/D/M/E
- Bloom’s Taxonomy (see appendix)
Pairing Learning Goals and Assessments

Assessments and Learning Goals should align e.g.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>be able to state</td>
<td>write a list</td>
</tr>
<tr>
<td>understand</td>
<td>be able to explain</td>
</tr>
<tr>
<td>create</td>
<td>make …</td>
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Pairing Learning Goals and Assessments

On your notes sheet …

Column 3:
Write some possible learning goals that would correspond in thinking level to each kind of assessment.
“The learner will …”
Application!

Think of a lesson / unit you taught recently.

1. Which of “C, D, M, E” were involved for the learners?
2. What were the thinking levels of the learning goals?
3. What were the thinking levels of the (formative or summative) assessments?
Application!

How might you adjust this lesson / unit to:
1. Have more diversity of C/D/M/E for the learners
2. Increase the thinking level of the learning goals
3. Match the thinking level of assessments with these learning goals
Turn & Talk

Share one adjustment you might make to your lesson that will increase Critical Thinking in your Classroom!
3:2:1 Reflection

- What **3** things stand out to me from today?
- What **2** things will I put into practice next week?
- What is **1** learning I will share with my school?
Thank you for your participation!