STRATEGIES FOR TEACHING CRITICAL AND CREATIVE THINKING IN YOUR CLASSROOM

Dr. Carla Brigandi
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What are some ways you could celebrate “Backwards Day?”
TOMORROW-BRING 5 PIECES OF CLEAN GARBAGE
Blocks, Barriers and Squelchers

1. Habit and Learning
2. Rules and Traditions
3. Perceptual Blocks
4. Cultural Blocks
5. Emotional Blocks
6. Resource Barrier
Examples of Perceptual Blocks
Davis (1997)

- Punctuate the following set of words to make a meaningful sentence:

  TIME FLIES YOU CANNOT THEY FLY TOO FAST

  TIME FLIES? YOU CANNOT. THEY FLY TOO FAST.
Examples of Perceptual Blocks
Davis (1997)

Consider this puzzle:
The police entered the gym containing five wrestlers just as the dying man looked at the ceiling and mumbled the words, “He did it!” They immediately arrested one of the wrestlers. How did they know which one?
THINKING SKILLS IN THE 21ST CENTURY
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Adapted from Teachers Guide for the explicit teaching of Thinking Skills (Burns, Leppien, Omdal, Gubbins, Muller & Vahidi, 2006)
Objectives
Teachers will be able to:

- Name cross-curricular thinking skills.
- Explain why it is important for students to develop the ability to think critically.
- Design ways to foster critical thinking in their students.
- Describe how to infuse thinking skills into classroom curriculum.
The Changing Scope of Catastrophe
Bad guys

- Lacking ethics and/or morality
- Lacking the ability to think
Goals and objectives

Teachers will be able to:

- Demonstrate an understanding of various cross-curricular thinking skills
- Explain why it is important for students to develop the ability to think critically
- Develop skills that allow them to foster critical thinking in their students
- Generate ideas for infusing thinking skills into classroom curriculum
Teacher’s guide for the explicit teaching of thinking skills

Seven Discrete Skills

- Cause and effect
- Decision making
- Comparing and contrasting
- Classifying
- Making observations
- Planning
- Predicting
Seven Discrete Skills

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Seven Discrete Skills

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Critical Thinking: Seven Discrete Skills

1. Cause and effect
2. Decision making
3. Comparing and contrasting
4. Classifying
5. Making observations
6. Planning
7. Predicting
Compare and Contrast

Candy 1
Different

Alike

Candy 2
Different
Observation

Mufaro’s Beautiful Daughters

Compare and Contrast:

Cinderella

Open Compare and Contrast

<table>
<thead>
<tr>
<th>HOW ALIKE?</th>
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</thead>
<tbody>
<tr>
<td>Both describe rivalry between daughters in a family.</td>
</tr>
<tr>
<td>Both result in a royal marriage for the girl selected.</td>
</tr>
<tr>
<td>In both stories, magic allows animals to change form.</td>
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<tr>
<td>In both stories, kindness wins out over selfishness.</td>
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<tr>
<td>Both stories occur at a time when kings and queens were rulers.</td>
</tr>
<tr>
<td>In both stories, the girl selected to be queen comes from the common people.</td>
</tr>
<tr>
<td>Both stories have a happy ending.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW DIFFERENT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITH REGARD TO</td>
</tr>
<tr>
<td>LOCATION</td>
</tr>
<tr>
<td>The story takes place in Africa.</td>
</tr>
<tr>
<td>The story takes place in Europe.</td>
</tr>
<tr>
<td>PARENTS</td>
</tr>
<tr>
<td>The father is the only parent in the story.</td>
</tr>
<tr>
<td>There is a father and a stepmother, but the stepmother makes most of the decisions.</td>
</tr>
<tr>
<td>RELATIONSHIP</td>
</tr>
<tr>
<td>The sisters were natural sisters.</td>
</tr>
<tr>
<td>The sisters were stepsisters.</td>
</tr>
<tr>
<td>USE OF MAGIC</td>
</tr>
<tr>
<td>Magic is used to test the girls who would be queen.</td>
</tr>
<tr>
<td>Magic is used to help the girl who is unfairly treated.</td>
</tr>
<tr>
<td>WHY CHOSEN</td>
</tr>
<tr>
<td>The king picks his bride for her worthiness and beauty.</td>
</tr>
<tr>
<td>The prince picks his bride for her beauty alone.</td>
</tr>
</tbody>
</table>

CONCLUSION OR INTERPRETATION:
Worthiness, as well as beauty, is important in choosing a queen in the African folktale, but beauty alone is important in the European tale.
Using Questioning Strategies

- Describe what happened after Manyara and Nyasha got to the king?
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- What was the main idea?
Using Questioning Strategies

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■ What was the main idea?
■ Demonstrate how Manyara and Nyasha are alike and different.
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- Is it better to be like Nyasha than Manyara? Why or why not?
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- If Nyasha had not been beautiful, how might the ending have been different?
Using Questioning Strategies

- Describe what happened after Manyara and Nyasha got to the king?
- What was the main idea?
- Demonstrate how Manyara and Nyasha are alike and different.
- If Nyasha had not been beautiful, how might the ending have been different?
  - Would the king reject a worthy queen who was not beautiful, or a beautiful queen who was not worthy?
  - Which is better, and what do you think?
  - Is a King a worthy King if he would reject worthy, but non-beautiful women as queens?
Debrief

- Name three cross-curricular thinking skills.
- Explain why it is important for students to develop the ability to think critically.
- What are some ways that you will foster critical thinking in your students?
- How will you infuse thinking skills into your classroom curriculum?
TOMORROW-BRING
5 PIECES OF CLEAN GARBAGE
“Failure to help the gifted child is a societal tragedy, the extent of which is difficult to measure but which is surely great. How can we measure the sonata unwritten, the curative drug undiscovered, the absence of political insight? They are the difference between what we are and what we could be as a society.” -- James J. Gallagher, 2014
Your Three Obligations

- Develop your talents
- Pass on what you learn
- Leave the world better than you found it