Metacognition in the Classroom: Teaching Students to Think About Thinking

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Major Points

Definition of Metacognition

1. Implications of Neural Plasticity for Learning and Teaching
2. Recognizing Human Potential
3. Understanding Intelligence
4. The Body-Brain System at Work for Learning
5. Metacognition as a Path to Becoming Functionally Smarter

Video: Neuroplasticity  [https://www.youtube.com/watch?v=ELpfYCZa87g](https://www.youtube.com/watch?v=ELpfYCZa87g)

Learning Style Surveys:
[www.educationplanner.org](http://www.educationplanner.org) “What’s Your Learning Style?”

The Sensory Motor Pathway
The Emotion Pathway
The Reward Pathway
The Attention and Memory Pathway
The Frontal Lobe Executive Function Pathway
The Social Pathway

Video: Your Brain Is Plastic  [https://www.youtube.com/watch?v=5KLPxDtMqe8&t=1s](https://www.youtube.com/watch?v=5KLPxDtMqe8&t=1s)

Driving your brain
optimist vs. pessimist – Treasure hunters and trash collectors
I-4 Model: information, interpretation, impact, influence

Materials geared toward students:
“Explainer: This is your Brain” from newsela.com
*Time to Train Your Brain*, by Jennifer Swanson (Cricket Media)

Goal setting with students
templates and samples
Social Studies
Setting goals
Homework

Name: __________________________
Date: _________________________
Day: __________________________

*** List your goals for this school year.
1. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

*** List your goals for Social Studies for this year.
1. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
**Social Studies**

**Setting goals**

*** Refer to your social studies goals from September and complete the chart:

<table>
<thead>
<tr>
<th>What was my goal?</th>
<th>How have I done with it?</th>
<th>What evidence shows how I have done?</th>
<th>What else can I work on to achieve the goal?</th>
<th>How can I revise the goal?</th>
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Questions for Reflection

Why did you choose to attend this session?

What did you already know about metacognition?

Have your ideas changed?

What was most confusing/intriguing/surprising about the session?

What, if anything, came to mind that you already do with your students that may promote their use of metacognitive strategies?

How explicit are you with your students about the thinking strategies and processes that you yourself use as a student of your discipline?

What is the most important thought you had while attending this workshop?

Did it have anything to do with metacognition?


Hardiman, M. (February 1, 2012) TEDxEnola - Dr. Mariale Hardiman - The Brain-Targeted Teaching Model. [https://www.youtube.com/watch?v=ZUbyi5Acc2U](https://www.youtube.com/watch?v=ZUbyi5Acc2U)


Neuroplasticity. (November 6, 2012). The Sentis Brain Animation Series. Video retrieved from [https://www.youtube.com/watch?v=ELpfYCZa87g](https://www.youtube.com/watch?v=ELpfYCZa87g)


Willis, J. (February 1, 2012). Neuroscience Pathways From Lab To Classroom: Dr. Judy Willis at TEDxEnola. Retrieved from https://www.youtube.com/watch?v=WHRyPbcLKis&t=23s


Zadina, J. (February 1, 2012) “Using Brain Research To Energize School Reform: Dr. Janet Zadina at TEDxEnola.” https://www.youtube.com/watch?v=2lzjo5swMmE