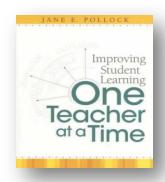
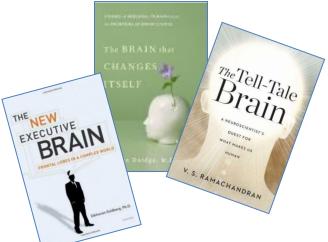
Jane E. Pollock, Ph.D. 720.985.1137

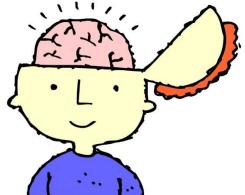
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Reading about Brain Research

<u>The Brain that Changes Itself</u>, Norman Doidge MD <u>The New Executive Brain</u>, Elkhonon Goldberg <u>The Tell-Tale Brain</u>, V.S. Ramachandran



Goal Setting

- 1. The brain is forward thinking-always planning to act (or not act).
- 2. The brain changes- plasticity
- 3. The brain processes information differently novel- declarative routine- procedural

Interactive Notebook

Student version of using the High Yield Strategies

Chapter	Category	Average Effect Size	Percentile Gain
TI			
2	Identifying similarities and differences	1.61	+45%
3	Summarizing and note taking	1.00	+34%
4	Reinforcing effort and providing recognition	.80	+29%
5	Homework and practice	.77	+28%
6	Nonlinguistic representations	.75	+27%
7	Cooperative learning	.73	+27%
8	Setting objectives and providing feedback	.61	+23%
9	Generating and testing hypotheses	.61	+23%
10	Questions, cues, and advanced organizers	.59	+22%

9 High Yield Strategies





Student

Interactive Notebook



Teacher

Daily Lesson Preparation (plan to be more deliberate about the use of the high yield strategies)

Goal

Access prior knowledge

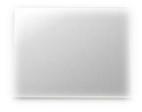
New information

Application

Generalize the goal

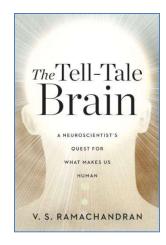








Dr. Ramachandran uses two simple tools to help patients resolve phantom limb pain.







1. Piece of Paper

Goal accounting template
Students self assess and engage with lesson goals and objectives (standards)



2. Notebook

Students take notes interactively to make learning visible while using high yield strategies and maximizing feedback



3. Clipboard

Teachers engage with lesson goals and objectives (standards) by scoring live or providing formative assessment

We could increase high school graduation rate to **92%** by teaching students and teachers to use these **3** simple tools



GANAGish Lessons

1975- Teachers set the goal

Today- Goal setting + Neuroscience Student's "interact" with the goal

GAG students in every lesson, every day

G- students interact with the goal

- read it
- write it
- repeat it

A- access their prior knowledge- neuronal courtesy

Ν

Α

G- revisit the goal (students interact with it again)

Assignment for next session:

Bring something that illustrates how you used notebooks with your groups or helped a student with his/her notebook in the classroom.

