

# Dr. Jane E. Pollock

Elementary Session 2

Sept. 23, 2011

Oct. 17, 2011

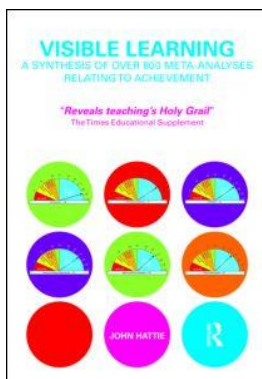
## Goals:

- ✓ Student Learning
  - Maximize Feedback
- ✓ Pedagogical Automaticity
  - GANAG- with high yield strategies
  - GANAG- as a procedure
  - Declarative/Procedural Knowledge
- ✓ Communication

## Great Resource:

### Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement

John A. C. Hattie 2009



GANAG with high yield strategies  
EVERY DAY, EVERY LESSON

		*CITW chapter
G	set a goal	8, 4
A	access prior knowledge	6,7
N	new information (declarative or procedural)	3, 5, 11
A	apply thinking skill/practice	2,9,10
G	generalize the goal, review, grade	8,4

*\*Classroom Instruction That Works*  
Marzano, Pickering, Pollock (2001)

Example GANAG lessons on the Rogers Webpage:

[http://curriculum.rogersschools.net/modules/groups/group\\_pages.phtml?gid=1351594&nid=192414&sessionid=6aa9f1fe2a0cd76bfc4caab13204ce0e](http://curriculum.rogersschools.net/modules/groups/group_pages.phtml?gid=1351594&nid=192414&sessionid=6aa9f1fe2a0cd76bfc4caab13204ce0e)

OR

Go to *Curriculum*

Click on *Supporting High-Yield Strategies, GANAG and Technology*

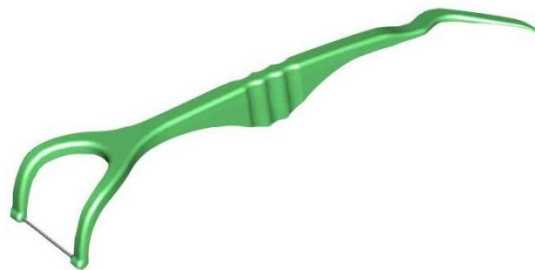
Click on *GANAG Overview*

Scroll down to *K12- GANAG Lesson Examples*

Q. What could you do to help you live better and 7-8 years longer?



### A. Floss regularly



In order to floss regularly, you must change your “automaticity”

Choosing to floss regularly is an example of **Positive Deviance:**

- ✓ **Science:** You are sick less often and you are removing the plaque that could lead to heart disease and stroke
- ✓ **Invisible in plain sight:** Flossers are and have been on the shelves at stores
- ✓ **Flip:** Using them regularly brings health benefits

GANAG as a procedure

**Big Four**

1. Curriculum Targets
2. Planned Instruction
3. Varied Assessment (Tasks)/Formative
4. Scoring/Grading to Curriculum Targets

<b>G</b>	8,4
<b>A</b>	6,7
<b>N</b>	3,5,11
<b>A</b>	2,9,10
<b>G</b>	8,4

## DECLARATIVE and PROCEDURAL KNOWLEDGE

"If you can name the parts of a bicycle, you have declarative knowledge or knowledge you can declare. If you can ride the bicycle, you have procedural knowledge, also known as habitual knowledge."

One Principal at a Time, Pollock and Ford (2009) Chapter 4 page 83



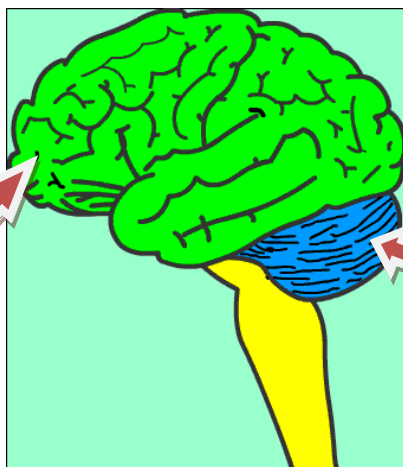
**DECLARATIVE KNOWLEDGE**  
One Principal at a Time, Pollock and Ford (2009) Chapter 4

Declarative knowledge is **EASY** to learn and **EASY** to forget

Processed in the Cerebrum

"When *understands or knows* prefaces a benchmark for a lesson, that benchmark is immediately recognizable as declarative knowledge." pg. 85

Declarative knowledge = apply a thinking skill



**PROCEDURAL KNOWLEDGE**  
One Principal at a Time, Pollock and Ford (2009) Chapter 4

Procedural knowledge is **HARD** to learn but **HARD** to forget

Processed in the Cerebellum

Approx. 80% of K-2 instruction is procedural knowledge

Procedural knowledge= practice

## Declarative and Procedural High-Yield Strategies

Classroom Instruction That Works Marzano, Pickering, Pollock (2001)

2- Identifying similarities and differences- **declarative**- thinking skill

3- Summarizing and note taking- **procedural**

5- Homework and practice- **procedural**

9- Generating and testing hypotheses- **declarative**- thinking skill

10- Questions, cues, and advance organizers- **declarative**- thinking skill