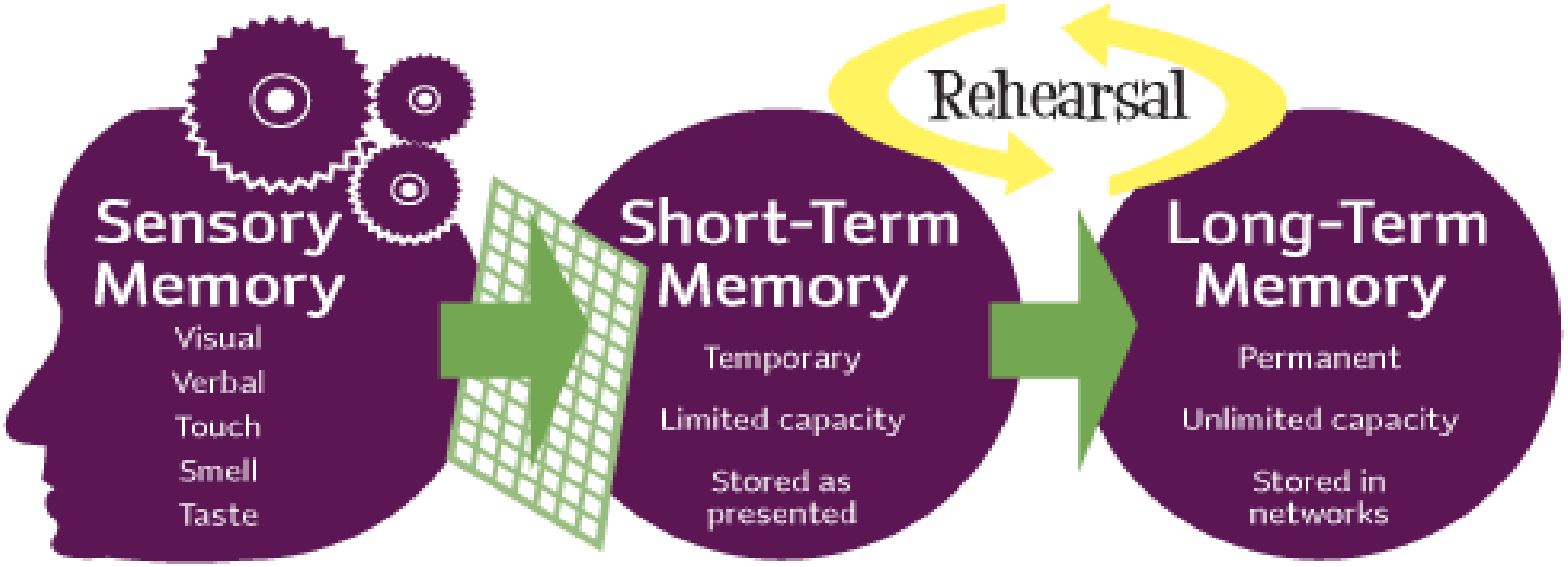
# Brained Based Learning

## Reflection

## Homework and Practice

# Homework as Reflective Learning

## "AN ELABORATIVE REHEARSAL TO FORMATIVE ASSESSMENT"



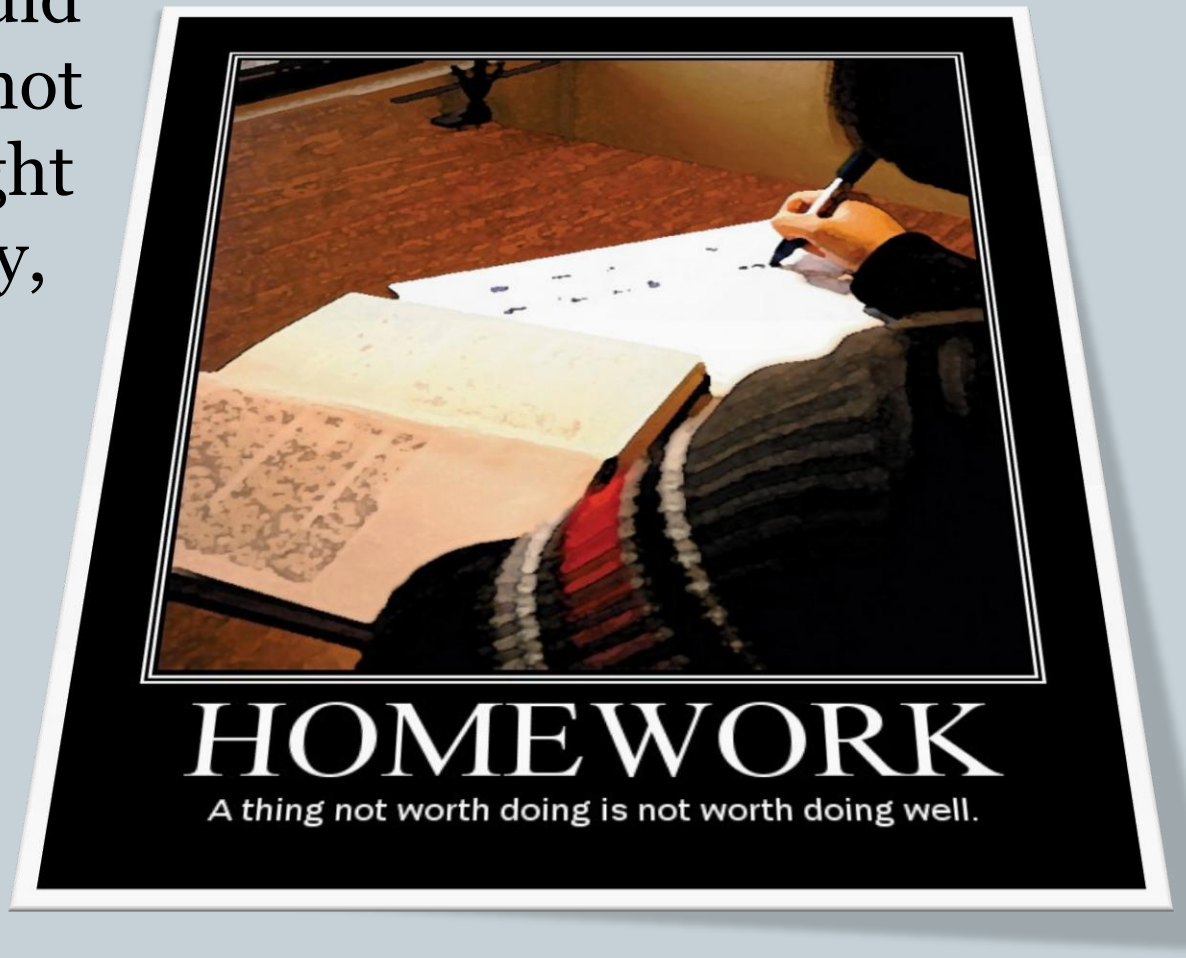
# Homework and Practice

- "Research referenced in Marzano, Pickering, and Pollock's book indicated students need to practice a skill 24 times to reach 80% competency, with the first four practices yielding the greatest effect."[1]

- 24 times to reach 80% competency

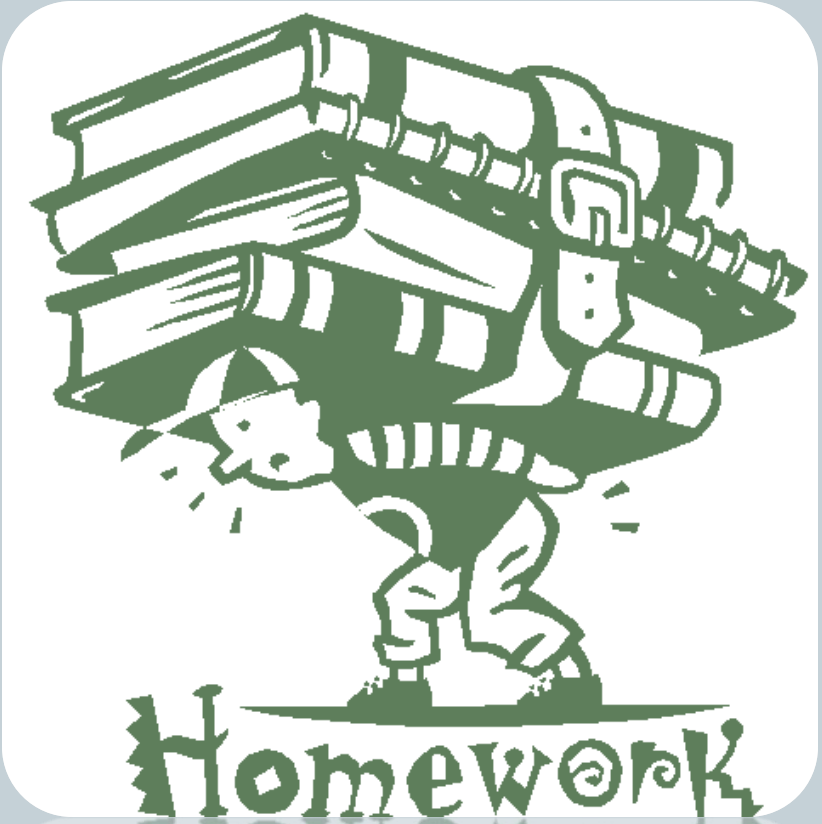
# Increasing Understanding

- Homework should be approached not as an afterthought to the school day, but as a focused strategy for increasing understanding.



# Procedural Memory

- Reinforcement of learning through practice and repetition is viable to procedural memory but may not support semantic, declarative or implicit memory when consolidation of ideas are needed in making conceptual ties.



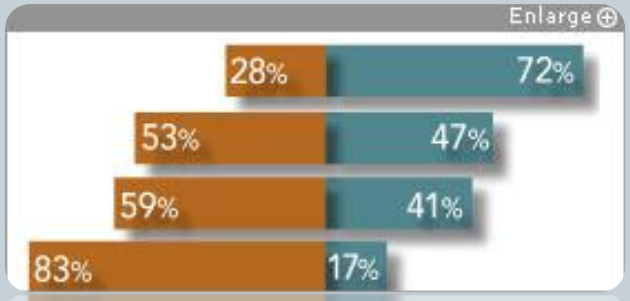
# Homework as Rote Rehearsal

- "This rote practices of learning in the traditional senses has made its mark by having students engage in hours, if not years of rote rehearsal."[2]

# Elaborative Learning

- If consistent practice is one component linked to gains in student achievement, and it has been noted that homework provides such practice, then the practices should not be built in rote replication but on a more solid practice of elaborative learning.

## Through Elaborative Learning



# The Expression of Ideas

- Through elaboration the learner can express ideas more openly using multiple skill sets to compare new concepts with known concepts that hooks the unfamiliar with something familiar.

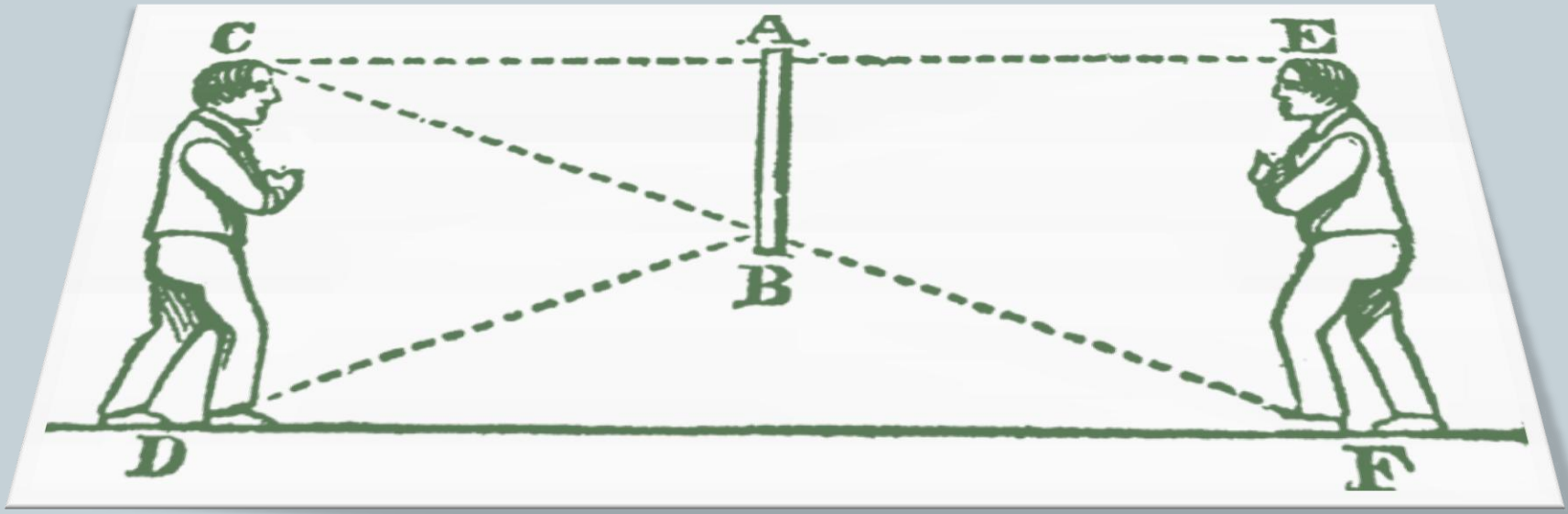
hooks the unfamiliar with something familiar

# Reflective Learning

- Reflective learning does not have to occurred in isolation and could be more effective in collaboration, as long as the process for elaborative learning has structure.

# Small Group Reflection

- Reflecting on homework in small groups is one avenue to reinforce elaboration skills on the meaningful concepts.

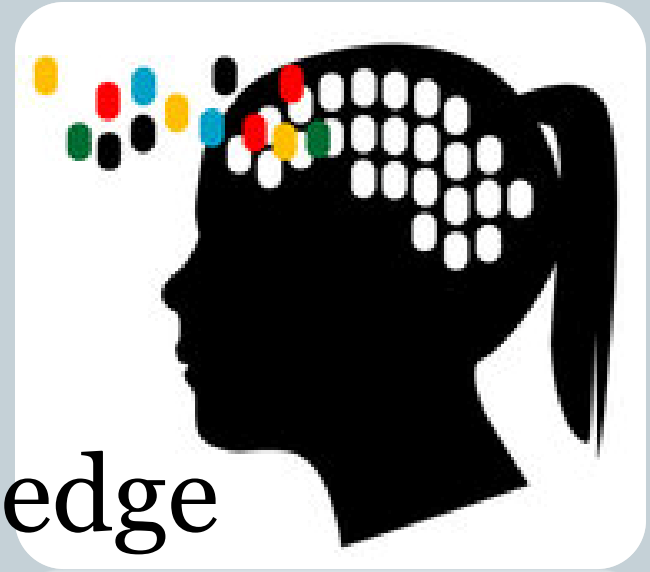


# Formative Assessment

- The reflective practices of homework allows for a formative assessment process to take place as the practitioner synthesis the exactness of knowledge and address misunderstandings in real time.

synthesis the

exactness of knowledge



# Confirmed Learning

- If providing feedback is directly associated in making a significant difference in student learning, then two elements of practice must be consistently factored, linkage between teacher comment to student answer and time associated to the reinforcement of confirmed learning.

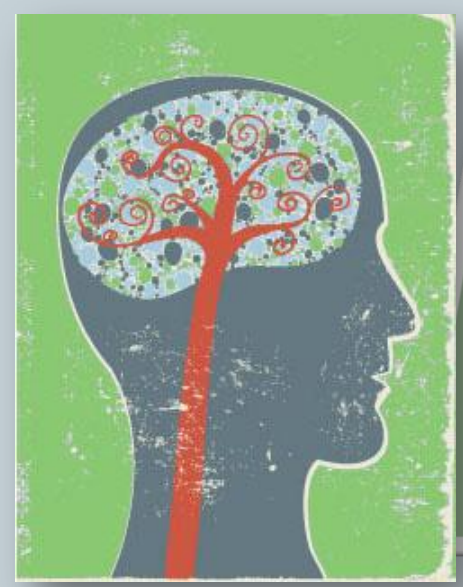
## LINKAGE BETWEEN TEACHER COMMENT TO STUDENT ANSWER

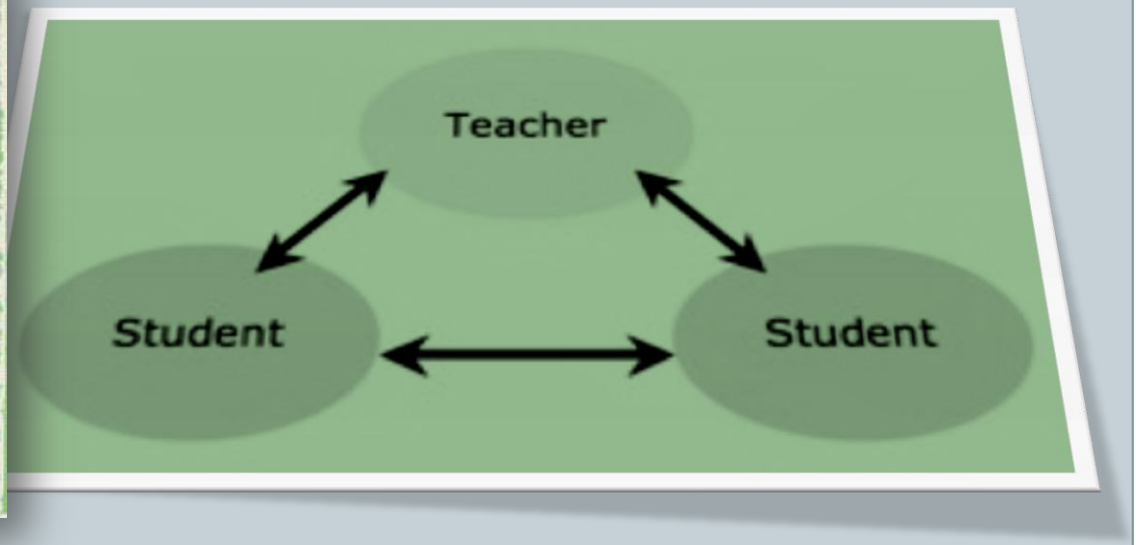
# Learning in Isolation

- If learning occurs in isolation then reflections of learning is also on hold until engagement can occur.

# Provision of Feedback

- Homework or practice in the sense of the provision of feedback should take the form of a new protocol as it relates to the formative reflective assessment process.





# Reflective Assessment Process

- Students use a discussion protocol to analyze homework solutions, share ideas, build vocabulary, and refine strategies by learning from each other.
- Ask students clarifying questions to evaluate the cognitive direction of their ideas and understanding of the unit project.
- Monitor students as they debate ideas, clarify thinking, and make adjustments to their work.

# See the strategy in action!

As you watch the video, think about these questions:

- How does the teacher structure homework review to build students' understanding?
- What do students learn from reviewing their work and that of their peers?
- How does the teacher benefit from students reviewing their homework in small groups?

# Additional Resources

- Find additional resource on Homework and Practice by selecting the following links.
- Visit the Digital Sandbox for Free eBook on iPad
- Full Article on Scribd

- Select the following link for additional resources on 21st Century Instructional Practices