Mastery Teaching Workshop

with John D. Mays

Lesson 11: Assessment Practices, Pt. 3

Outline:

Assessment Practices (Setting the Bar)

- Embedding Skills, find ways to embed old information in new content
  - Require unit conversions.
  - Constant use of metric system
  - Constant use of algebra (isolating variables)
  - Constant use of scientific notation, percentages, significant digits
  - Frequent use of common math formulas – perimeter, area, volume
  - Repeated use of vocabulary, at first with reminder definitions, later without the definitions
  - Relating new knowledge to old knowledge by concepts building on each other
  - Writing
  - Computing averages
  - Mole calculations (e.g., atomic mass to mole, number of particles in mass of a compound)
- Use assessment formats that promote learning.
  - Enemy:
    - True-False
    - Matching
    - Fill-in-the-blank
    - Multiple choice (mostly)
  - Friend:
    - Verbal responses in complete sentences (Novare has sample answers for all of the questions.)
    - Computations
  - We need to do what is best for the student and not what is convenient for the parent.
- Always deduct points for missing units of measure, incorrect spelling, poor grammar, etc.
  - Give partial credit for problems that have part wrong.
  - We need rich content in response to the question.
  - Prepositions in the sentence are important.
- Compel students to show their work completely. Be stingy on partial credit when they don't.

    - This is not a matter of just getting the right answer. Problems will get more challenging. Then it is imperative that we have developed good problem solving disciplines.
        - This includes showing work for each steps including units of measure.
- Do not assume students are practicing and rehearsing old material the way you tell them to.
    - Encourage them to study for review.
- Hold short interviews to review performance.
    - Tell students it is time for a check-in every 4-6 weeks.
    - Look over scores with the students, and review how things are going.