Teaching Science Classically: 10 Essential Principles

with John D. Mays

Lesson 7: Mastery

Outline:

Mastery

- You cannot teach science without mastery.
- It is common for students to profess that they know almost nothing due to the cram-pass-forget cycle. This cycle lies at the room of the problem of modern education.
- Mastery is a level of solid proficiency accompanied by long term retention.
- Replace cram-pass-forget cycle with the learn master retain cycle.
- Learning gives students true self esteem.
- Coaches and choir directors expect mastery, they constantly rehearse old material and old plays.
- Science is every bit as fascinating as arts in other forms.
- We need to think in terms of mastery and learn how to teach for mastery.
    - Spend an adequate amount of time on the topic at hand.
    - Cull the curriculum down (350-400 page book).
    - Make assessments all cumulative. Every test and quiz has content on it from prior chapters. Mastery is constantly being emphasized.
    - Teach students how to study, this enables students to learn for mastery.
    - Mastery can change students' lives.
- Ask yourself, "What will my students be mastering today?"
- For education to occur, learning must occur.