

Goals of a Math Classroom

Guiding Principles

- Have a Montessori approach - as a psycho-discipline
- Ultimate goal: to aid in the development of the mathematical mind

What do I want to see?

- Engaged students who are self-motivated to do meaningful work and we guide them happily through the discipline of mathematics in order to help them achieve their goals.
- Should it even be a “class” at all?

How do we realistically get there?

- Do what we know how to do well.
- Constantly observe behaviors and the environment.
- Add on and change to move closer to ideal as we prepare ourselves and the environment.
- See the positive in what is happening.

Progression of a Program

- Level 0: Textbook Based
- Level 1: Textbook-Based with Projects as Supplements
- Level 2: Project-Based with Textbook as Supplement
- Level 3: Individualized Curriculum Supported by Projects
- Level 4: Individualized Curriculum with Full Integration into All Disciplines

General Principles

- use of the three-period lesson*
- freedom to choose work
- work must be meaningful
- students should be engaged
- individualized
- need opportunities for deep work
- fun, safe, collaborative environment

General Principles

- Finding balance between:
 - Individual Work and Group/Class work
 - Teacher Presentations and Open Work*

Components

- math seminar
- history
- materials
- projects / applications
- key lessons
- open work time

Considerations

- class size
- physical space
- schedule / time constraints
- staffing
- ability
- content

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Three-Period Lessons

- During the 45th lecture held during the Rome course, Montessori wrote, “***What needs to be known is the little we need to teach. However, it must be taught in an absolutely exact manner, especially when a conventional rule has already been established.***”