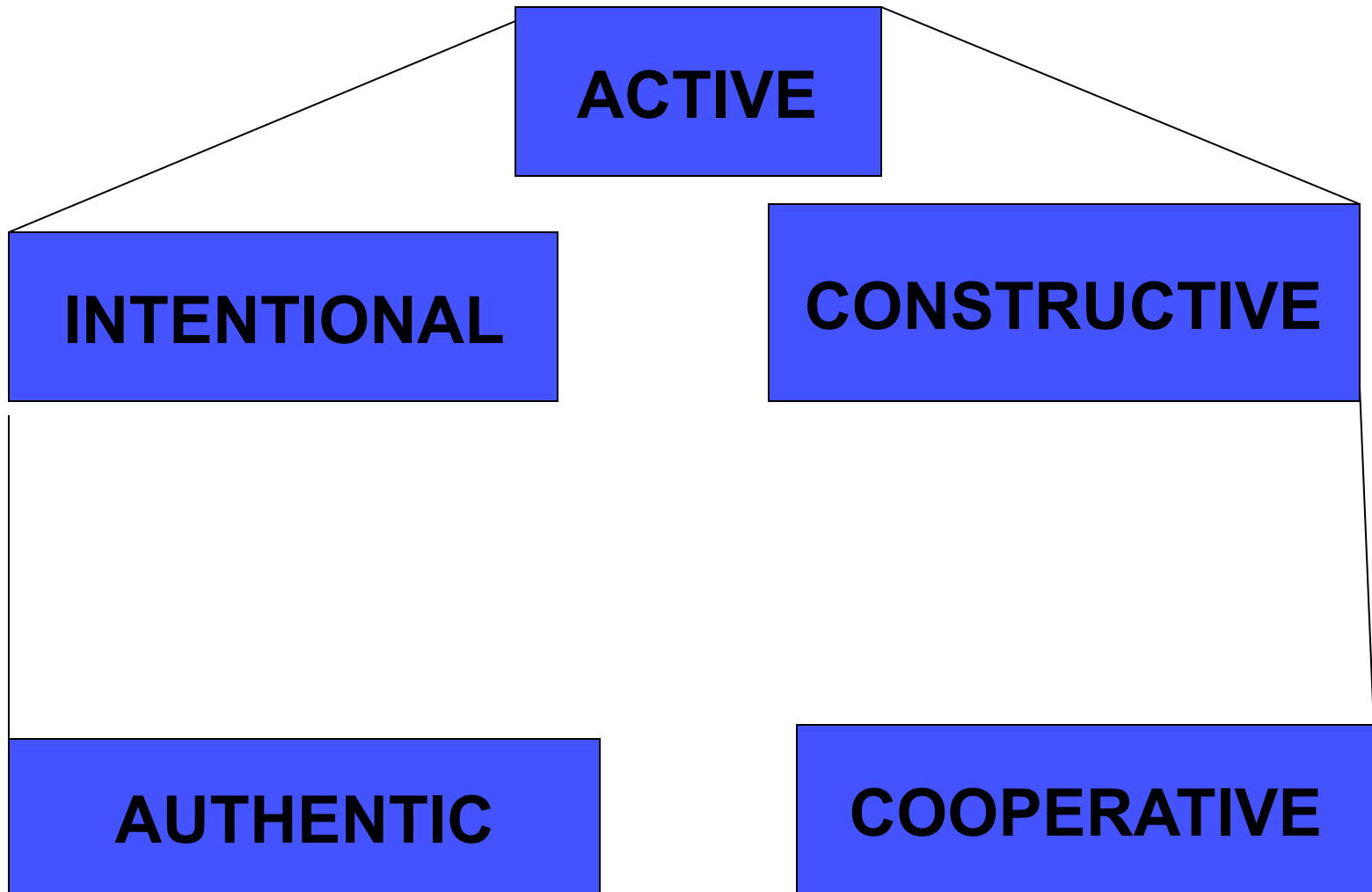
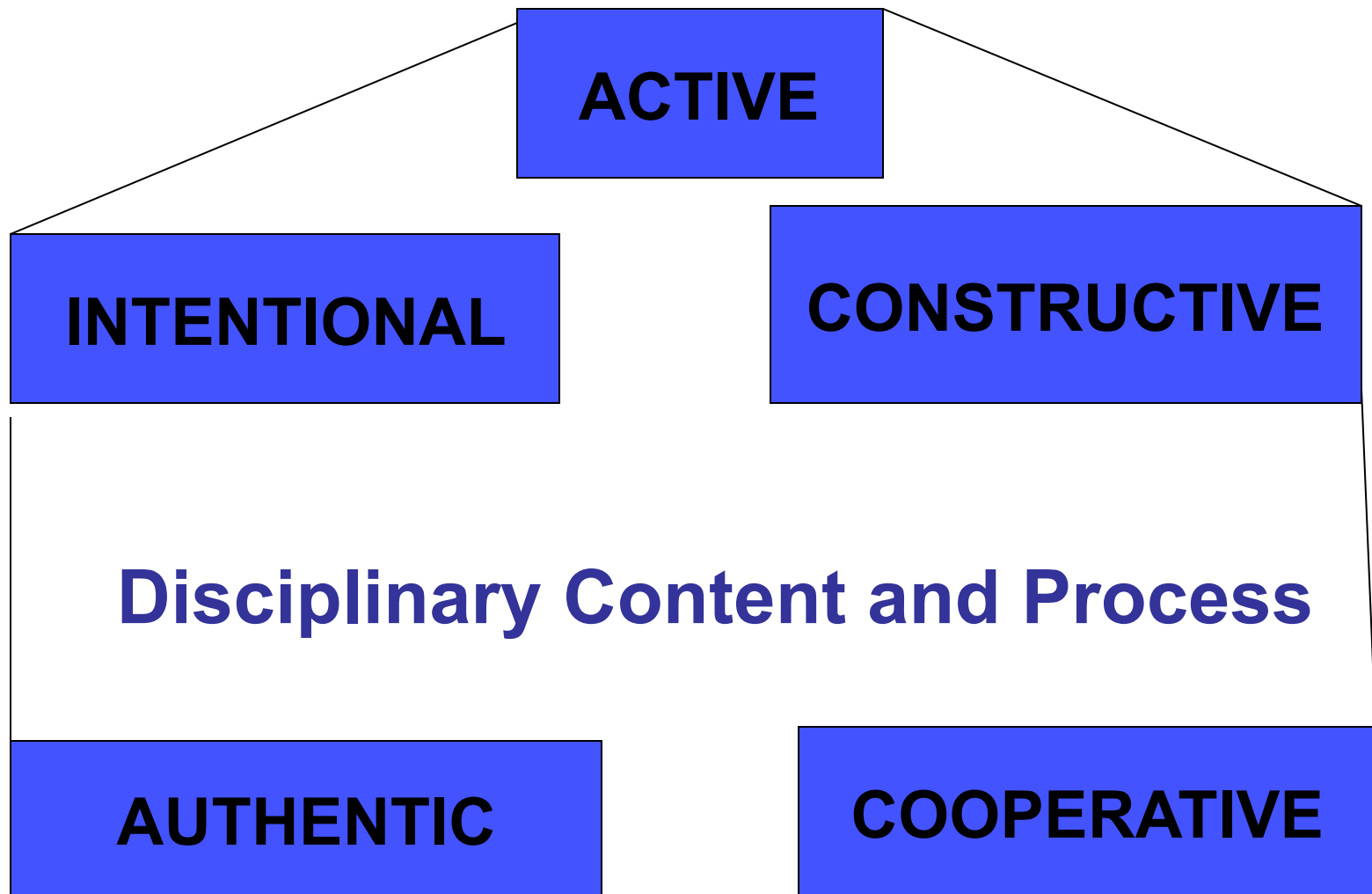


Meaningful and Authentic Learning

Learning to Solve Problems with
Technology

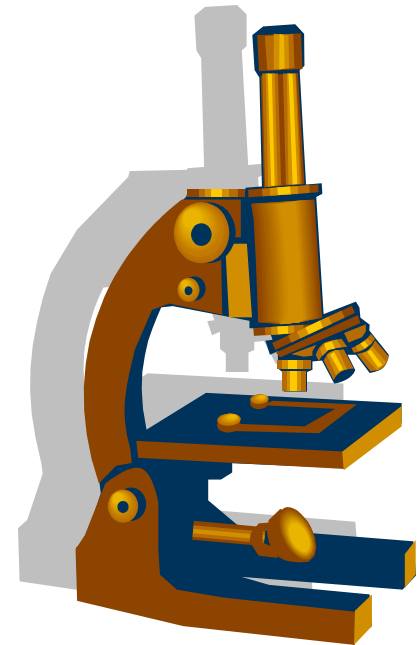
CI 513: Dr. Thieman





Meaningful Learning is **Active**

- Students experiment, observe results, modify or manipulate their environment
- **GTEP –try new technologies & teaching strategies & see what works**



Meaningful learning is **Constructive**

- Students construct meaning by reflecting on their experience, and developing new schema to accommodate discrepant information; organizing information; considering alternatives; developing hypotheses
- **GTEP Backwards Curriculum Design; Enduring Understanding, Essential Questions ????**

Meaningful learning is **Intentional**

Students are actively engaged in intentional decision making: goal; strategies; results

Students reflect on their learning

GTEP: choose the topic & curriculum standards for your mini unit; design lessons & assessment strategy

Meaningful Learning is **Authentic**



- Teach knowledge & skills through real world tasks, problem based learning in context
- Complex, messy problems
- **GTEP unit/lesson design are at heart of what teachers do**

Meaningful Learning is **Cooperative/** **Conversational**

- Students work collaboratively in groups, develop multiple perspectives & solutions; audience beyond the classroom or school; substantive oral, written communication
- **GTEP: working in teams to develop miniunit**



Disciplinary Content & Process

- Content: subject matter
 - literary genres, cause & effect, number theory, properties of matter, chronology, historical evidence, scientific data, public issues, visual & performing arts
- Process: skills
 - Analyzing text
 - Creative or expository writing
 - Discussing
 - Presenting
 - Interviewing
 - Interpreting
 - Analyzing
 - Sequencing