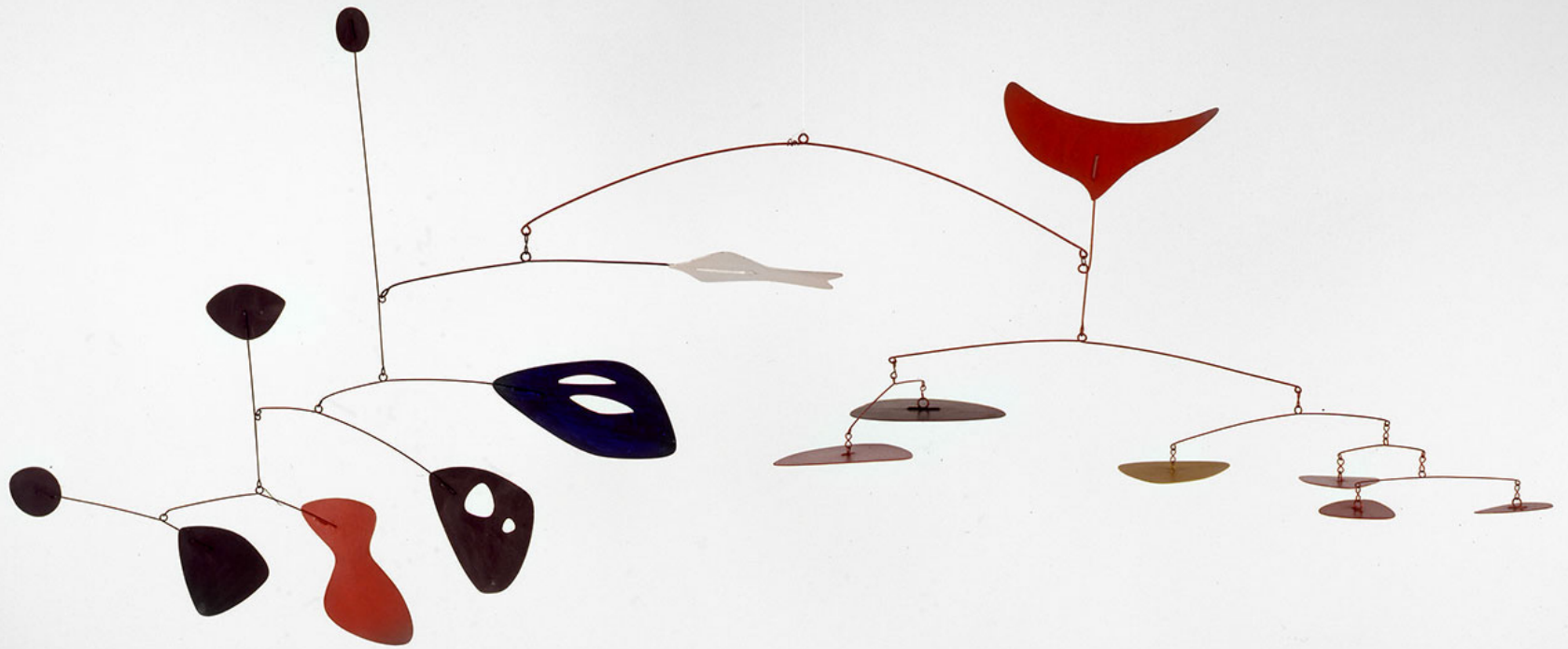


# Teaching Philosophy

Tony Scarlatos

Lecturer, Computer Science

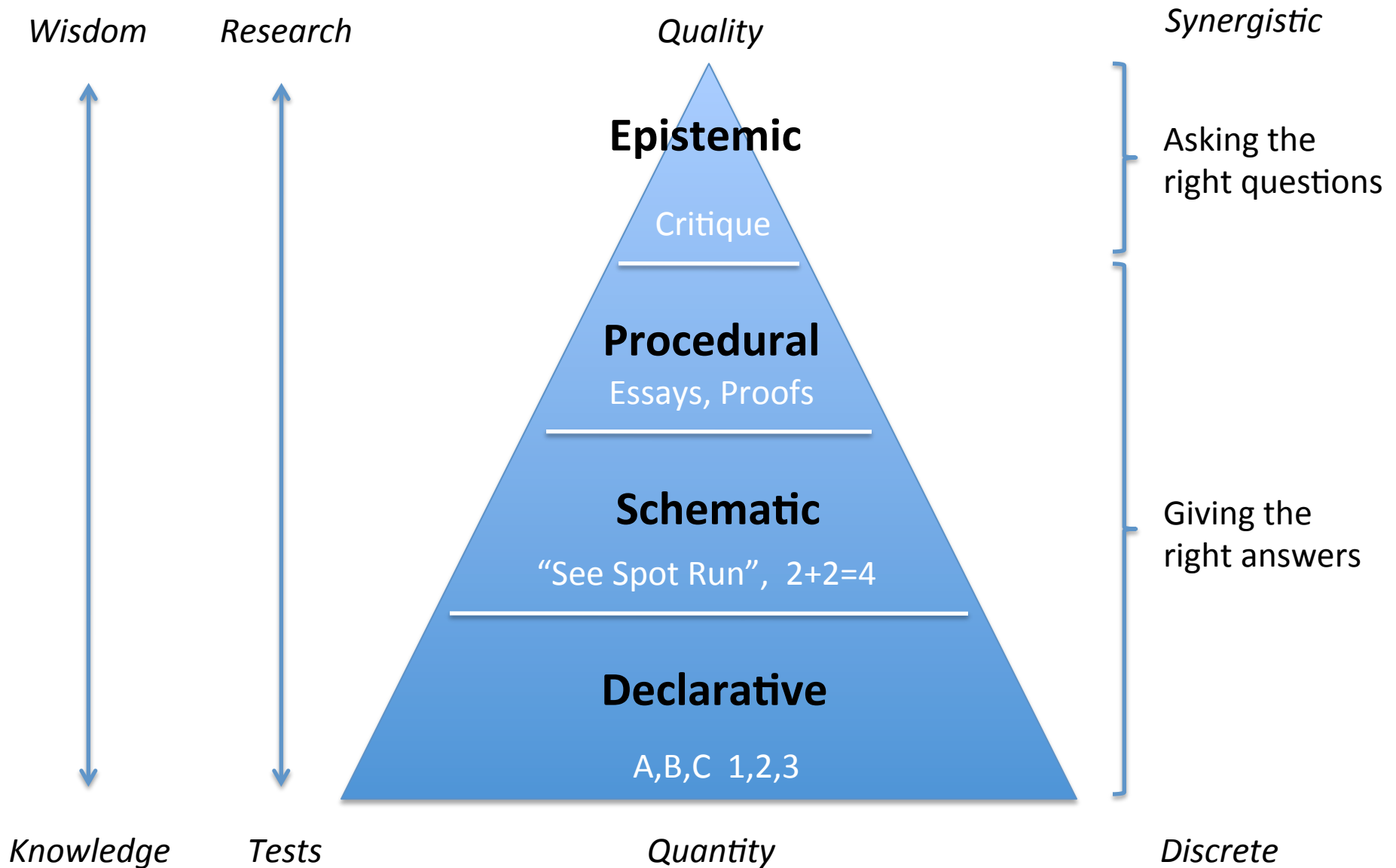


Alexander Calder (July 22, 1898 – November 11, 1976)

# Constructivism

- Learning is based on constructs – taxonomies of data points (connecting the dots, not just filling them in)
- Emphasis is on experimentation and hands-on experience
- Learning is a collaborative, social process
- Dewey and Montessori were pioneers; Piaget, Vygotsky, and Papert are well known proponents

# From Knowledge to Wisdom



# Learning Constructs

- Declarative
  - Basic vocabularies, acquired primarily by repetition (mnemonic techniques help), simple tests provide adequate assessment
- Schematic
  - Basic constructs, such as grammar and syntax rules, multiplication tables, etc., still acquired primarily by rote, tests still provide adequate assessment
- Procedural
  - Larger constructs, such as the five paragraph essay or a geometric proof, that require combinations of schema to deliver the desired result, assessment becomes more qualified than quantified
- Epistemic
  - Knowing how to learn, how to apply previously acquired constructs to unfamiliar problems, assessment increasingly becomes the duty of the learner

# Gardner's Multiple Intelligences



# My Teaching Goals

- Provide a learning environment that:
  - Is rich with tools for exploration and experimentation
  - Supports collaboration
  - Is stable and secure
- Provide instruction that:
  - Uses multiple modalities to support different learning styles and types of information
- Use assessments that:
  - Emphasize growth, iterative learning, trial and error
  - Reward integrity, curiosity, and persistence

# The **A++** Recipe for Success

- **A+++itude**
  - Professional, respectful, courteous, curious
- **A+++endance**
  - Regular and prompt
- **A+++ention**
  - Focused
- = **A+++ainment** of your goals



# What's really at stake?

- Much more than just a grade or a few more credits toward graduation
- Opportunities for UG research and publication, such as URECA and CIT
- Opportunities for mentoring, such as 475
- Recommendations for employment and graduate school
  - at least 2 semesters of research-related coursework