

DOD Conference on Civilian Education and Professional Development

**Quality Initiatives for the 21st Century:
Continuing the dialogue**

**Assessing Curriculum via Critical Thinking
Roy Eichhorn - Army Management Staff College**

8 August 2000

Critical Thinking

A Definition We Use

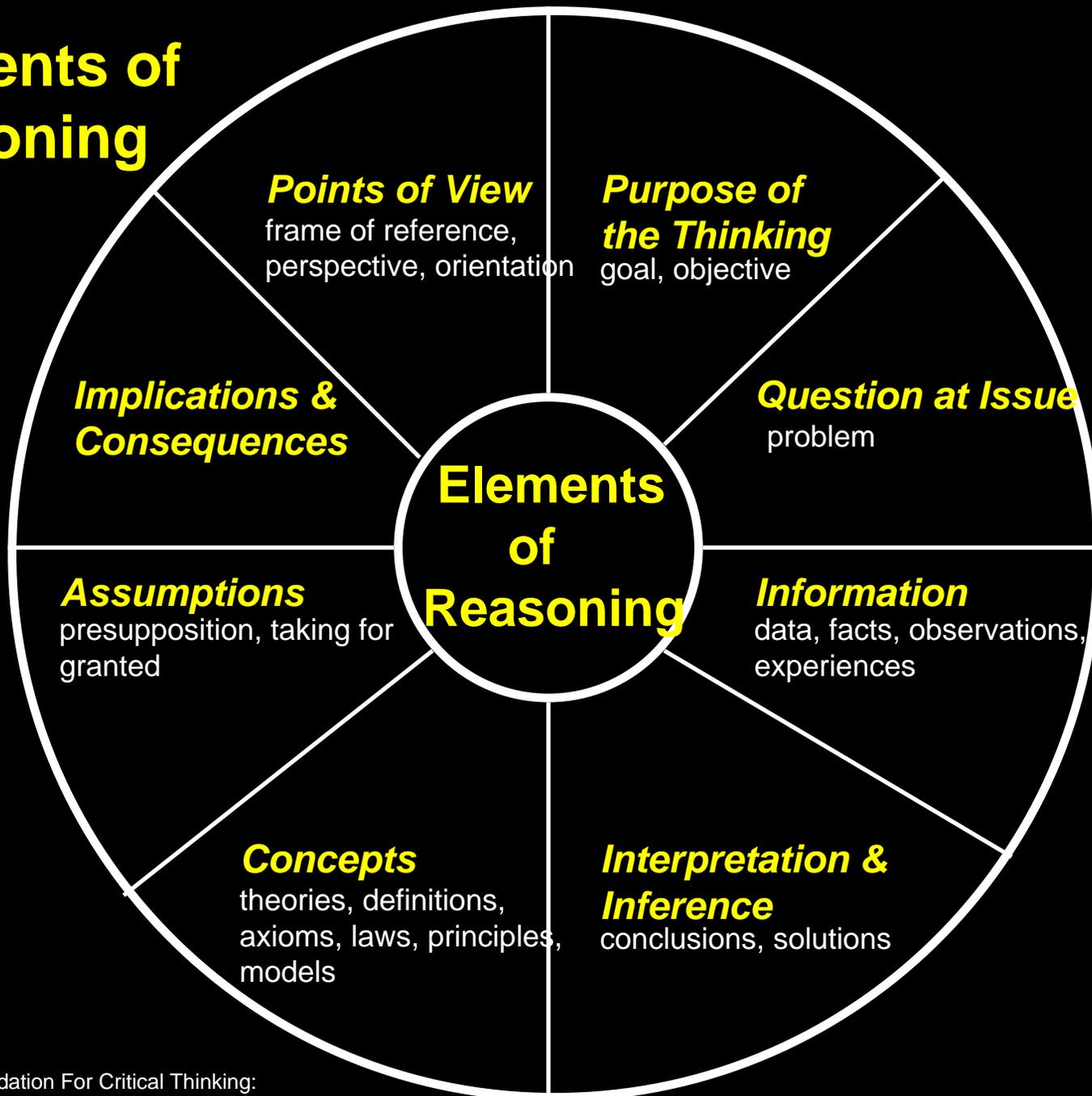
The Ability to think about one's thinking in such a way as:

1. to recognize its strengths and weaknesses and, as a result,
2. to recast the thinking in improved form

INTELLECTUAL STANDARDS FOR CRITICAL THINKING

- **CLARITY**
- **ACCURACY**
- **PRECISION**
- **DEPTH**
- **BREADTH**
- **RELEVANCE**
- **LOGIC**

Elements of Reasoning



Assessment

Customer Requirement

How do you Know That?

Required Competency

How do you Know That?

Outcomes

How do you Know That?

How do you Know That?

What is Success?



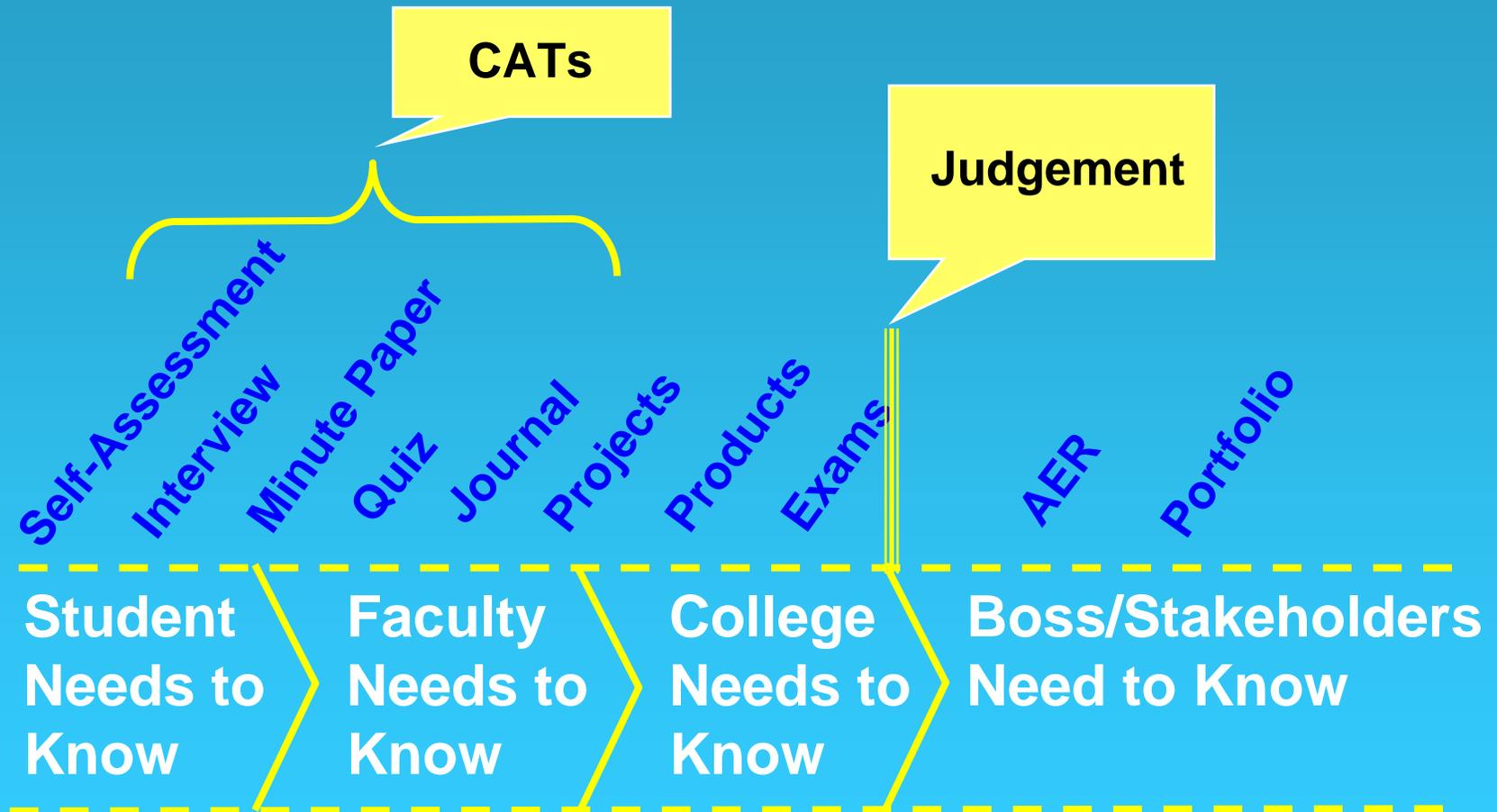
Assessment- Focus and Point of View

Student: Does He/She “Get it?”

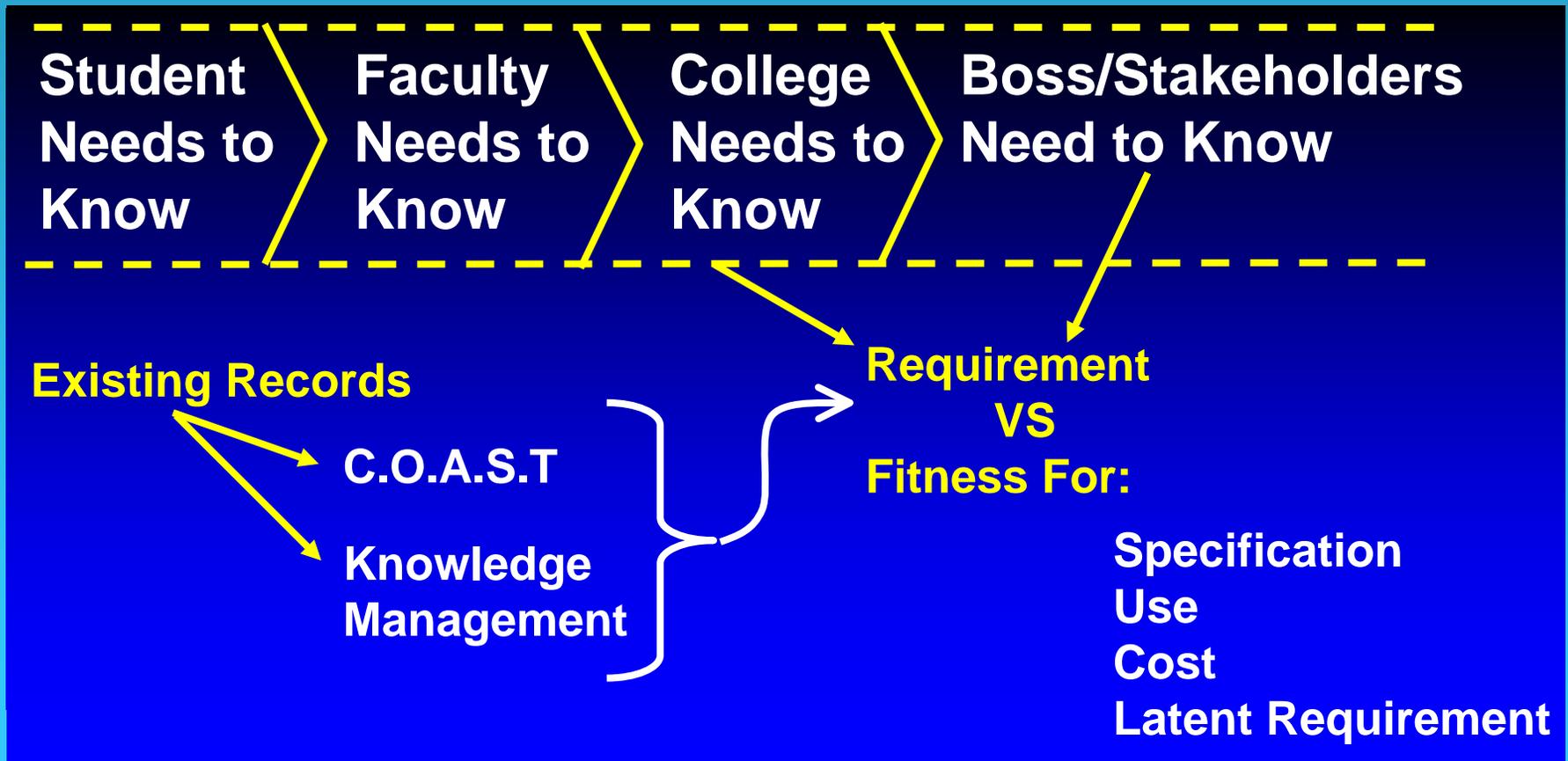


Program: Does it Work?

Does the Student “Get it?”



Does the Program Work



APPROACHES TO TEACHING THINKING

**TEACHING OF
THINKING**

**Direct Instruction
in thinking in non
curricular contexts**

**TEACHING FOR
THINKING**

**Use of methods
which promote
thinking in
curricular contexts**

INFUSION

**Restructuring
content lessons for
direct instruction
in thinking**

INFUSION integrates direct instruction in specific thinking skills into content area lessons. Lessons improve student thinking and enhance content learning

APPROACHES TO TEACHING

Competencies

TEACHING OF
COMPETENCY

Direct Instruction
in competency in non
curricular contexts

TEACHING FOR
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Use of methods which
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Restructuring content
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APPROACHES TO TEACHING

Competencies

TEACHING OF
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Instruction in writing,
grammar, sentence
structure

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Instruction using military
terms and situations as
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INFUSION

Use authentic situation
that would require a
written product

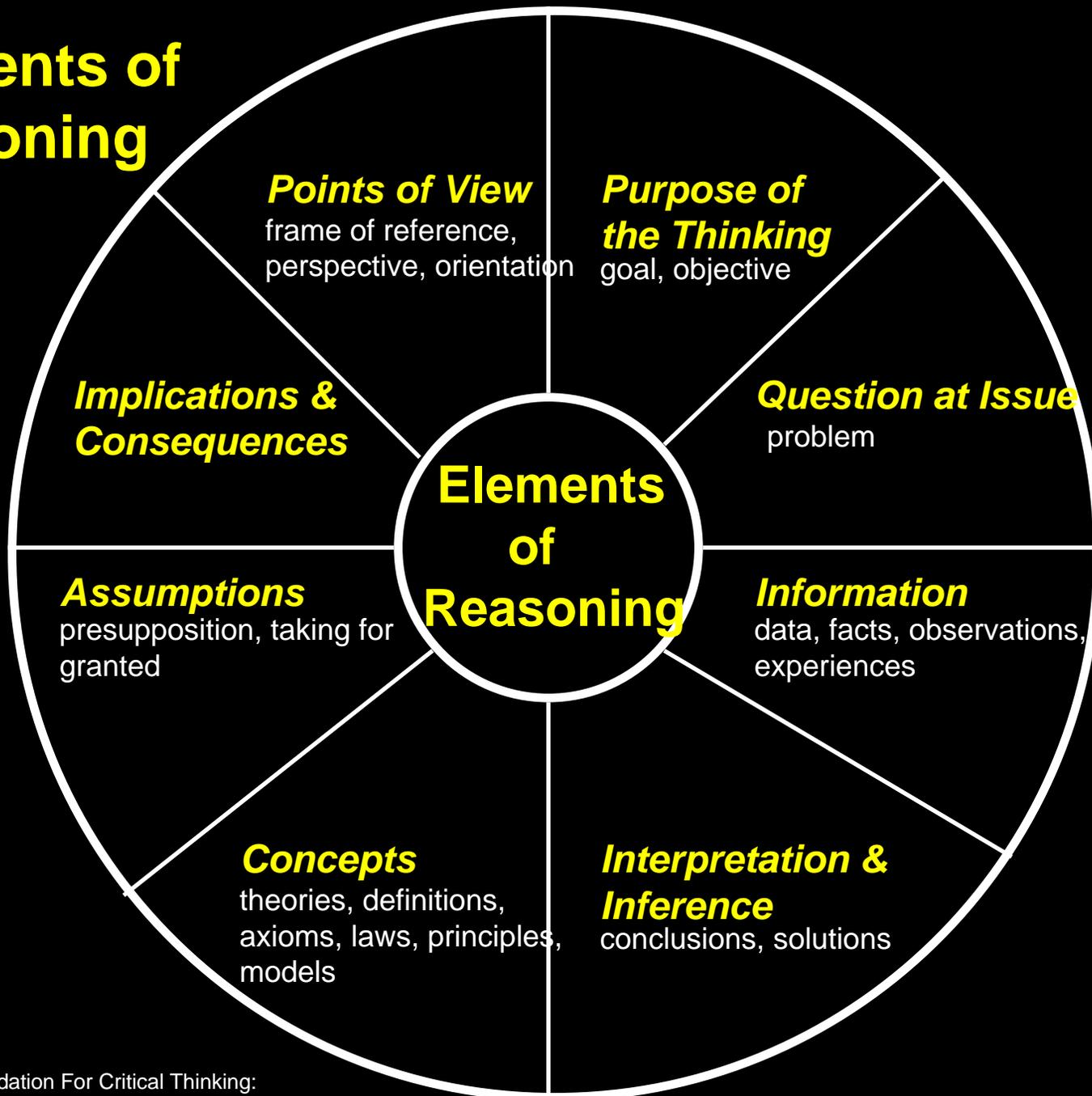
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DOMAINS OF THINKING DISCIPLINES IN EDUCATION



- PSYCHOLOGICAL
- SOCIAL
- BIOLOGICAL
- RELIGIOUS
- ECONOMIC
- EDUCATIONAL

Elements of Reasoning



Curriculum as a Function of the Developers

- Curriculum development and delivery is either a team sport or a performance art
- Assessment is a performance art
- Not everyone is Rembrandt

Perry/Gardiner's Model of Intellectual Development

Cognitive Complexity

Degree of Abstraction

Commitment

Constructed Knowledge

Relativism

Multiplicity

Subjective Knowledge

Procedural Knowledge

Dualism

Received Knowledge

Dualism

- *There is a right answer to every question*
- *All other answers are wrong*
- *Right Answers are dispensed by authority*
- *Authority “Knows”*

Implication: learners are dependent

Multiplicity

- *Legitimate authorities disagree - more than one opinion can be “Right”*
- *To have an opinion makes it “Right” since no absolute truth exists*
- *No one is “wrong”*

Implication: no one has a right to criticize

Relativism

- *All knowledge depends on context*
- *Responsibility & initiative for knowing and thinking are internalized*
- *Obedience is rejected - meaning is constructed by oneself*

Implications: capacity for empathy, critical thinking now exist

Commitment

- *Although the world is complex, I must still make commitments.*
- *Principles and direction in life must come from within.*

Implication: New Behavior - makes commitments to people, careers, principles

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Critical Thinking

Techniques for Stimulating Thinking

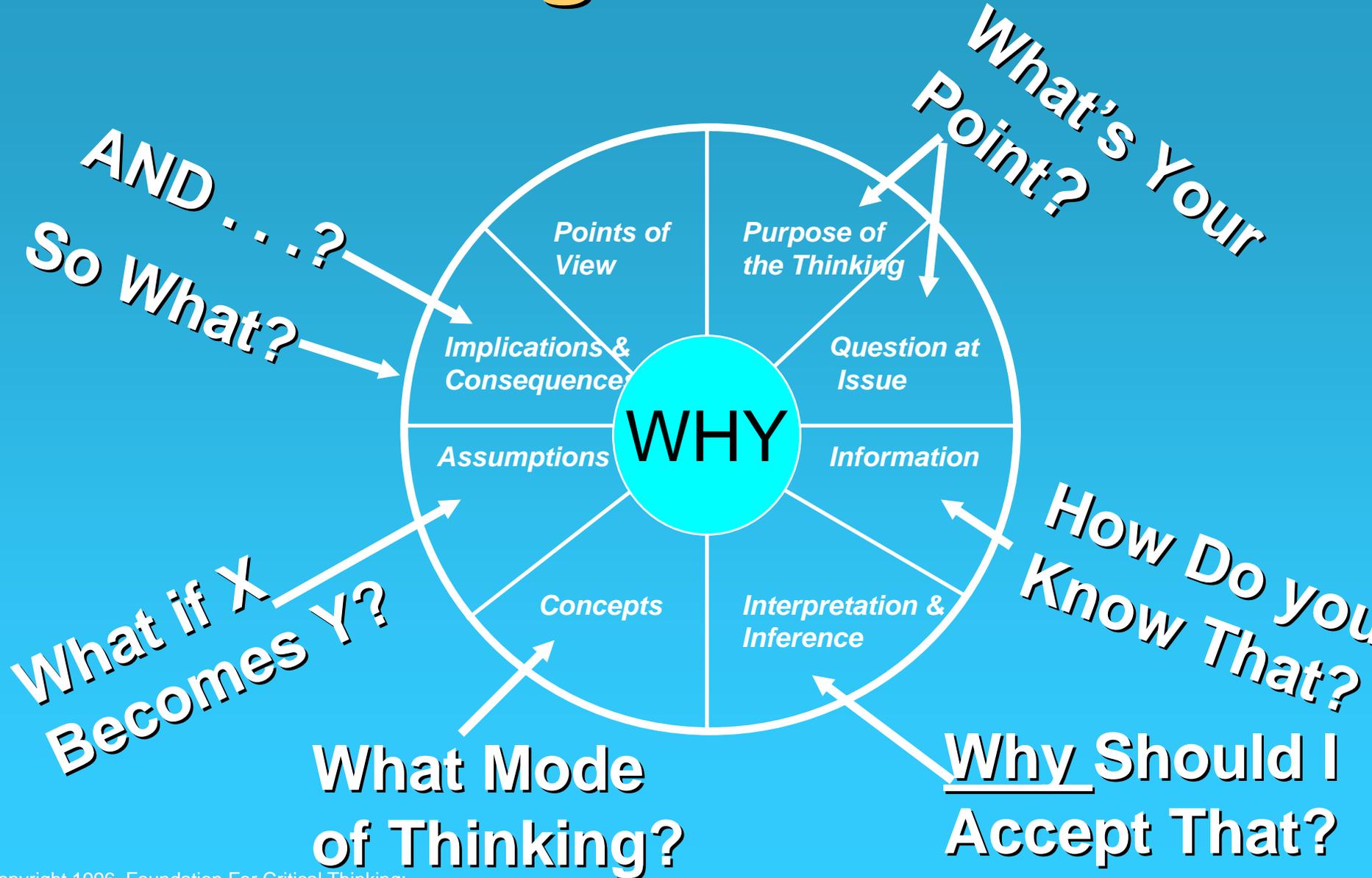
And the Answer is:

The Question!!

Some Useful Questions

- “What’s Your Point?”
- “How do You Know That?”
- “Why Should I Accept That?”
- “Could You Explain it Another Way?”
- “So What?”
- “AND . . . ?”
- “What if X becomes Y?”

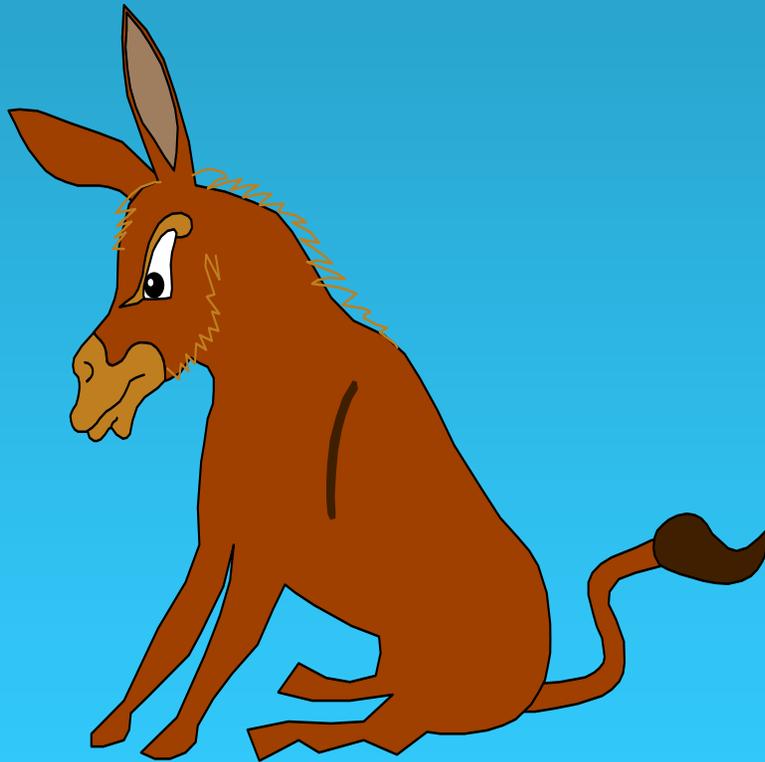
Target Areas



Tips/Thoughts

- Examine “Revealed Truth”
- Examine “Accepted Wisdom” (We all know that . . .)
- Question Sources - WHY is that source valid, why did you pick that particular source?
- How did you acquire your point of view ?

EGOCENTRISM



- Defensiveness
- Irritability
- Arrogance
- Anger
- Apathy
- Indifference
- Alienation
- Resentment

Thank You!!

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