# CRITICAL THINKING AND PEDAGOGY AT IRSC

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### WHY, WHAT, AND HOW?

What does it have to do with me?

#### WHY: RICK SCOTT TO FL UNIVERSITY PRESIDENTS

 "Many university graduates are unable to find jobs in their field of study and many employers are concerned that university graduates are not equipped with the appropriate writing skills, critical thinking skills and technical expertise needed to succeed."

#### WHY: LINDA QUEST IN FORBES, 2011

 According to the results of an American Management Association (AMA) <u>survey</u>, executives say the typical knowledge and skills in the areas of reading, writing, and arithmetic (the three Rs) are no longer sufficient for managers. To ensure success in the workforce of the future, the three Rs need to be fused with four other skills (the four Cs): 1) critical thinking and problem-solving skills, 2) communication skills, 3) collaboration skills, and, 4) creativity and innovation skills.

#### WHY: BRUCE FRASER'S GELO REPORT

 Like communication, critical thinking is a highly variegated and complex concept. If any of the GELOs has an overarching character, encompassing many or all of the others, it is critical thinking, since it involves a high level of linguistic competence, mathematical ability, an understanding of scientific methodology, heightened metacognitive awareness, and a fairly sophisticated knowledge of core subject areas such as history, literature, political science, psychology, and sociology (thinking is influenced by the conclusions and assumptions of these and other disciplines).

#### WHAT: GOOGLE DEFINITION

- crit i cal think ing
- noun
- the objective analysis and evaluation of an issue in order to form a judgment.
- "professors often find it difficult to encourage critical thinking amongst their students"

#### WHAT: MICHAEL SCRIVEN & RICHARD PAUL, 1987

 "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness..."

#### WHAT: THE FOUNDATION FOR CRITICAL THINKING

 Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and selfcorrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism.

## METACOGNITION: THINKING ABOUT THINKING

#### HOW: IRSC CTI

 I was awarded the Gladys Williams Wolf Endowed Teaching Chair in Communications in 2013. My proposal was to form a Critical Thinking Institute that would bring together ten faculty members a year, for three years, to define critical thinking among themselves. Each instructor would then design or refine an assignment that would teach critical thinking as the group had defined it, and finally, create assessment methodology to measure the success of each assignment in teaching critical thinking.

### DO YOU TEACH CRITICAL THINKING?

- What is critical thinking in your field?
- How might you discuss metacognition?
- How might students understand your classes in terms of critical thinking?
- •How will this benefit them?

