

Critical Thinking for the First Term and Beyond

Faculty Development Day

Wednesday, September 2, 2009

Critical Thinking – many definitions

- Critical Thinking “is exploring questions about and solutions for issues which are not clearly defined and for which there are no clear-cut answers” (American Accounting Association)
- “We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based.” (American Philosophical Association)

Critical Thinking – a broad definition?

- “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.”
(Scriven and Paul for National Council for Excellence in Critical Thinking)

Critical thinking – core elements

- Intellectual standards/rigor
- Pursuit of improvement
- Application of structure/method to thought
- Commitment to “values”

Critical Thinking in FTS

(more info on FTS Program website)

- Reasoning – evidence and logic
- Assumptions and Implications – contexts and consequences of ideas
- Perspectives – potential for disagreement among rational people
- Questioning – asking questions and pursuing answers to those questions effectively

What do we know about how we are doing?

- Wabash National Study of Liberal Arts Education
 - Study of teaching practices and outcomes at 26 participating colleges and universities.
 - Tracking students over course of four years.
 - Current data comes from first-year experience of students in 2005-2006.
- FTS Assessment Survey
 - Administered to first-year students in December 2007 and December 2008
 - Responses from over 500 students each year, representing over 80% of first-year class

Wabash Study

- Good news – Gustavus scored above peer group average in many areas, including:
 - During the current school year, how many assigned textbooks, books, or book-length packs of course readings have you done?
 - During the current school year, how many written papers or reports between 5 and 19 pages have you done?
 - In a typical week, how many problem sets take you more than an hour to complete?
 - What is the extent to which your examinations during the current school year challenged you to do your best work?
 - About how many hours in a typical week do you spend preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)?
 - To what extent does your institution emphasize spending significant amounts of time studying and on academic work?
 - In your experience at your institution during the current school year, about how often have you asked questions in class or contributed to class discussions?
 - In your experience at your institution during the current school year, about how often have you made a class presentation?
 - In your experience at your institution during the current school year, about how often have you prepared two or more drafts of a paper or assignment before turning it in?
 - In your experience at your institution during the current school year, about how often have you come to class without completing readings or assignments? (reverse coded)

Wabash Study

- Bad news – Gustavus scored below peer group average in many areas, including:
 - How often have exams or assignments required you to use course content to address a problem not presented in the course?
 - How often have exams or assignments required you to compare or contrast topics or ideas from a course?
 - How often have exams or assignments required you to point out the strengths and weaknesses of a particular argument or point of view?
 - How often have exams or assignments required you to argue for or against a particular point of view and defend your argument?
 - How often have faculty asked challenging questions in class?
 - How often have faculty asked you to show how a particular course concept could be applied to an actual problem or situation?
 - How often have faculty asked you to point out any fallacies in basic ideas, principles, or points of view presented in the course?
 - How often have faculty asked you to argue for or against a particular point of view?
 - How often have faculty challenged your ideas in class?
 - How often have students challenged each other's ideas in class?
 - How often have you had discussions regarding inter-group relations with diverse students (e.g., students differing from you in race, national origin, values, religion, political views) while attending this college?

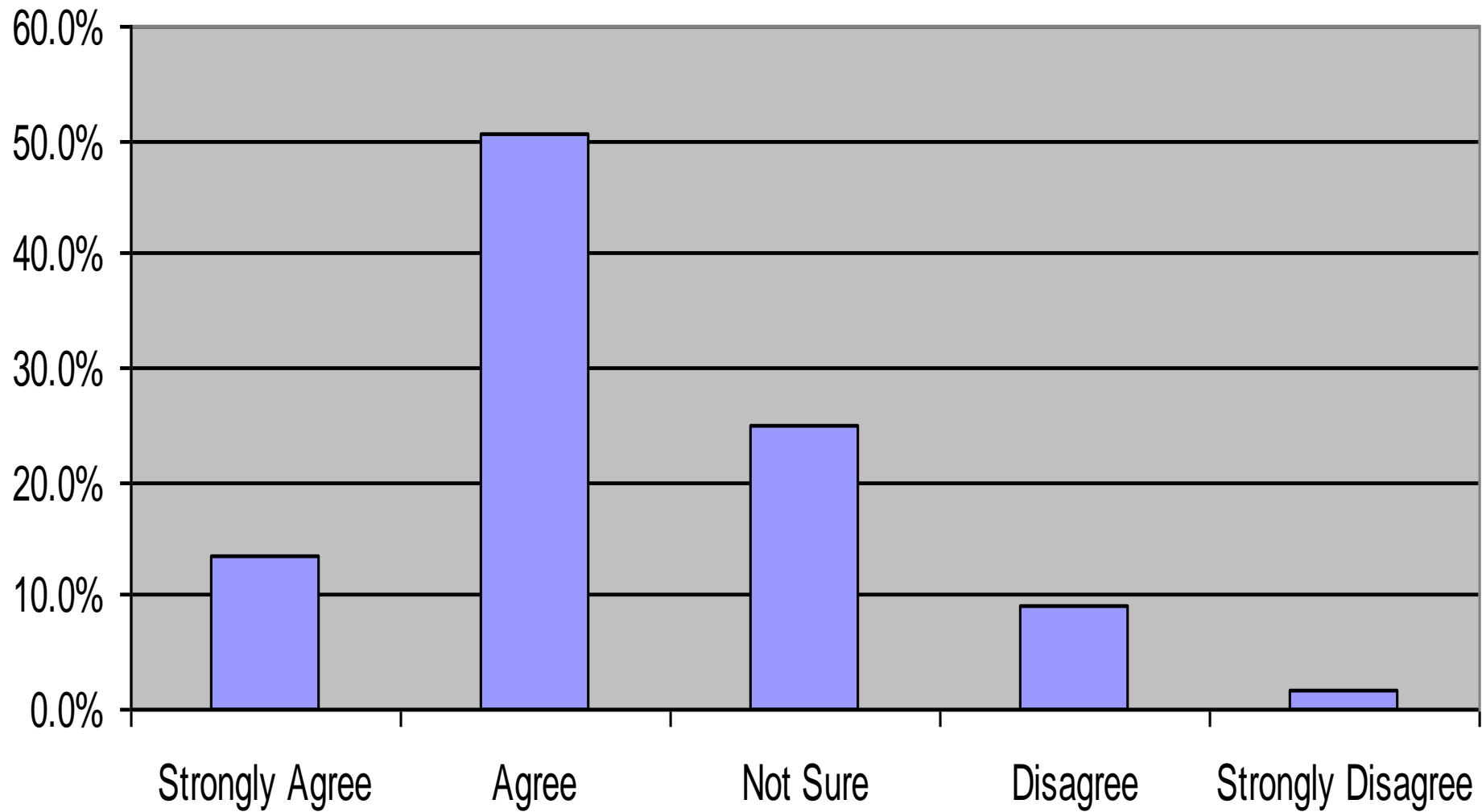
FTS Assessment Survey

- Good news on following questions (over 60% agree/strongly agree):
 - “Moral/ethical questions/topics covered in this FTS made an important contribution to my learning in this course”
 - “I have learned how to distinguish between scholarly and popular sources”
 - “I have learned how to construct an effective argument”
 - “I can better understand how context influences an argument”

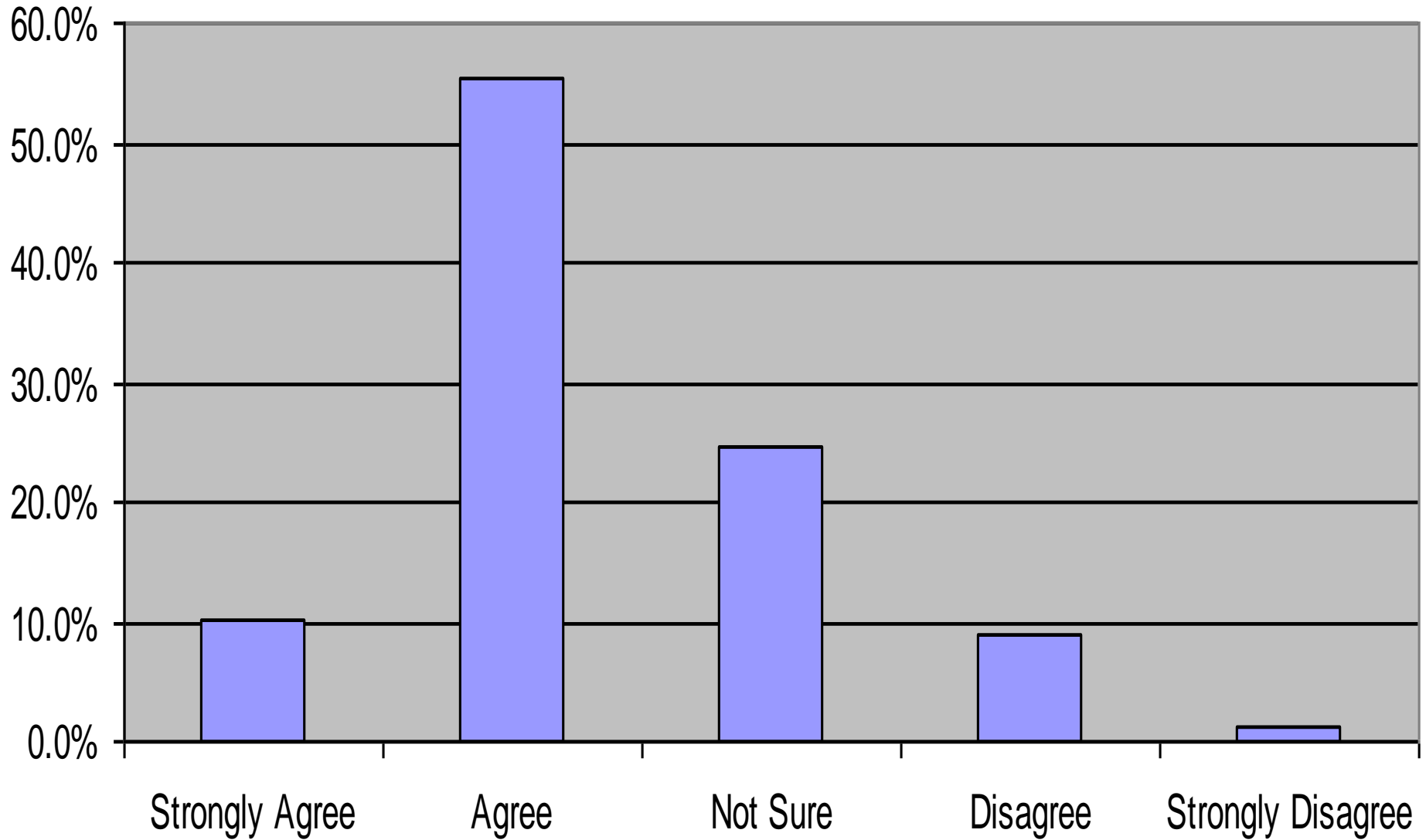
FTS Assessment Survey

- Not so good news:
 - “I can better identify the unwritten implications or consequences of a conclusion” – 40% answer “not sure”
 - On most critical thinking questions, only about 10% “strongly agree” that they are developing key skills.

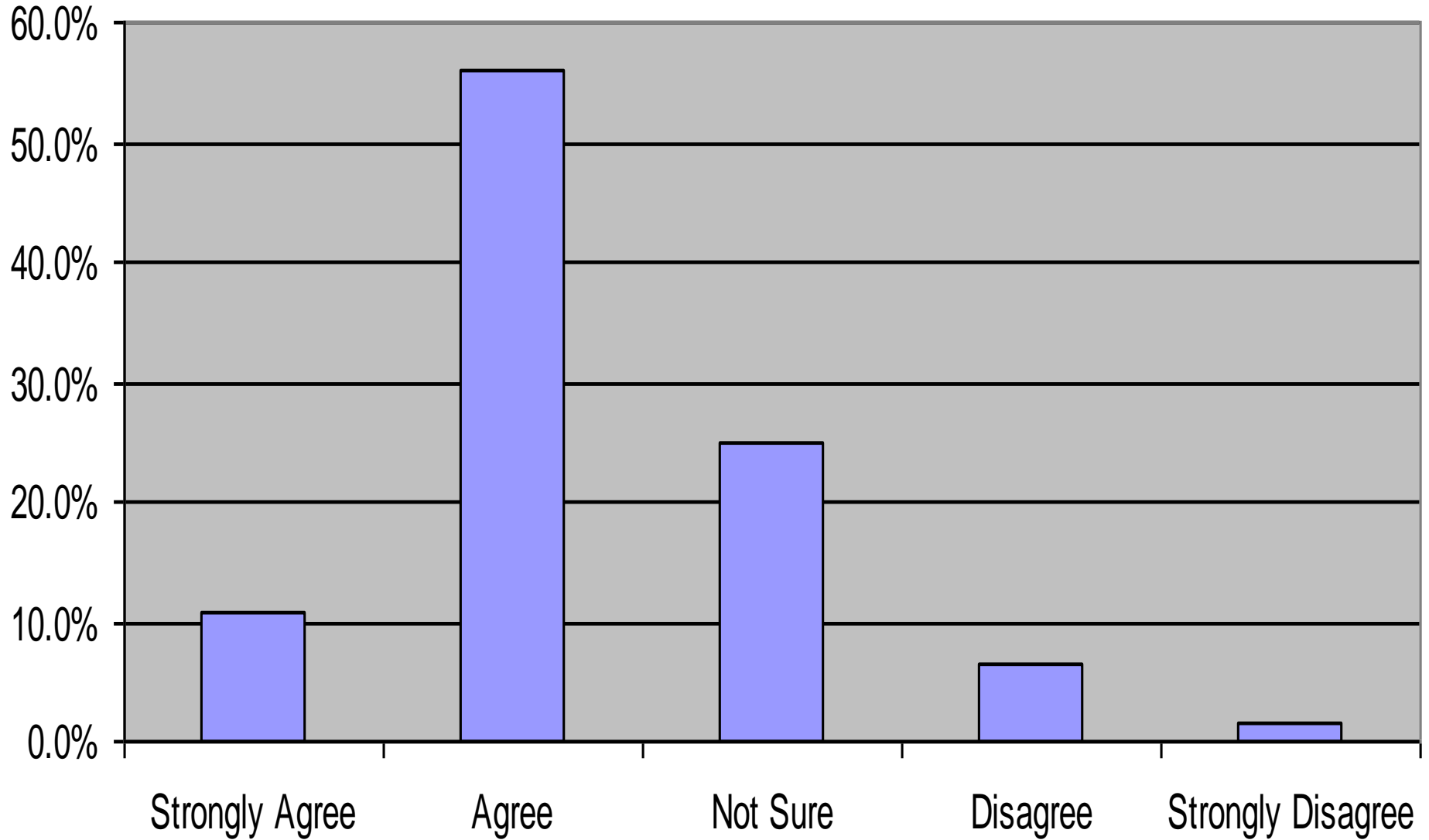
In this course I have learned how to distinguish between scholarly and popular sources.



I have learned how to construct an effective argument



I can better understand how context influences an argument



Improving focus on critical thinking

- Sample FTS assignment
 - Students read 2-page speech by John F Kennedy
 - Students asked to identify thesis/conclusion
 - Students asked to list premises that support this thesis/conclusion
 - Students asked to think about assumptions that shape Kennedy's thinking
 - Students asked to think about implications of accepting Kennedy's way of thinking – what would world look like if it accepted his conclusions?
- Help students understand how critical thinking skills and methods can take their understanding of material to new levels
- Try to apply these skills and methods often enough (over four years) that they begin to take root.

Critical Thinking beyond FTS

- What opportunities do you see in your courses to supplement or build on work of FTS Program?