# Improving Critical Thinking through the Assessment of High-Impact Practices

## ASSESSING CRITICAL THINKING

### CRITICAL-THINKING ASSESSMENT T (CAT)

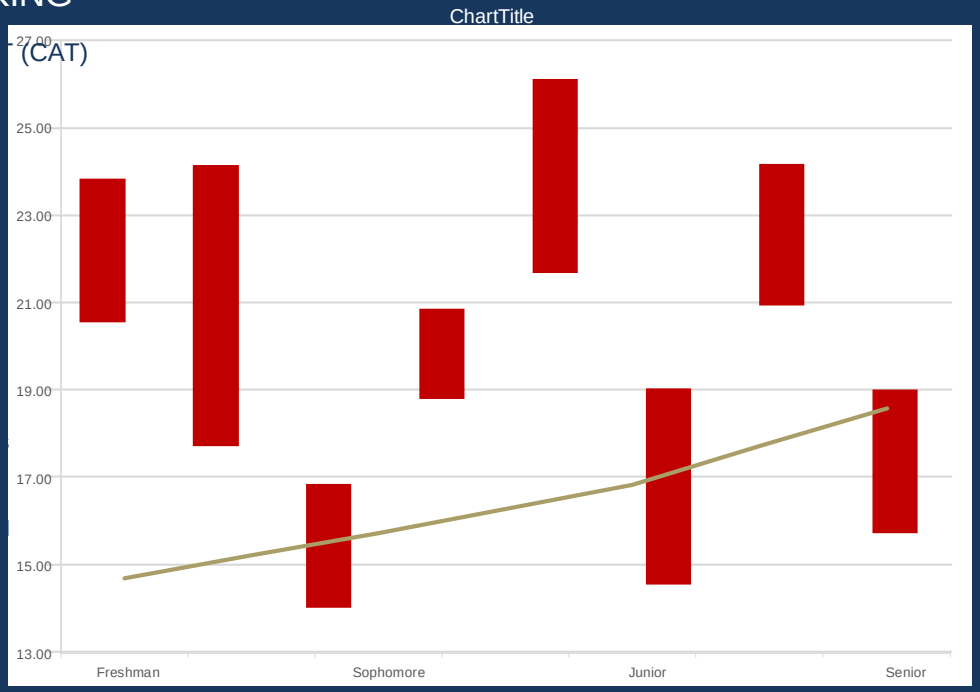
- Developed by faculty from a wide variety of institutions and disciplines.
- Guided by experts in the cognitive/learning sciences and assessment fields.
- Supported by the National Science Foundati (NSF).

An effective tool to assess critical thinking (CT) variety of disciplines and a means to h researchers and faculty identify effective strate to improve students' CT skills.

### IMPROVING CRITICAL THINKING

Ongoing work in the Center for Assessment as other projects, some funded by NSF, that making significant progress in improving stude CT skills. These collaborations are providing u information to transform educational practices.

A considerable number of projects have sh significant overall gains in CAT performance others have found significant gains on one or m questions associated with treatment effects. Th results demonstrate the potential usefulness of CAT instrument as a tool for measuring treatm effects in courses and programs that have targ critical thinking/real-world problem solving usi high-impact practices.




## SKILLS EVALUATED BY THE C

### EVALUATING INFORMATION

- Separate factual information from inferences
- Interpret numerical relationships in graphs.
- Understand the limitations of correlational data
- Evaluate evidence and identify inappropriate conclusions.

### CREATIVE THINKING

- Identify alternative interpretations for data or observations.
- Identify new information that might support o contradict a hypothesis.
- Explain how new information can change a problem.

### LEARNING & PROBLEM SOLVING

- Separate relevant from irrelevant information.
- Integrate information to solve problems.
- Learn & apply new information.
- Use mathematical skills to solve real-world problems.

### COMMUNICATION

- Communicate ideas effectively.