

# **Project CAT: Assessing Critical Thinking Skills**

## **Final Report**

**Tennessee Technological University**



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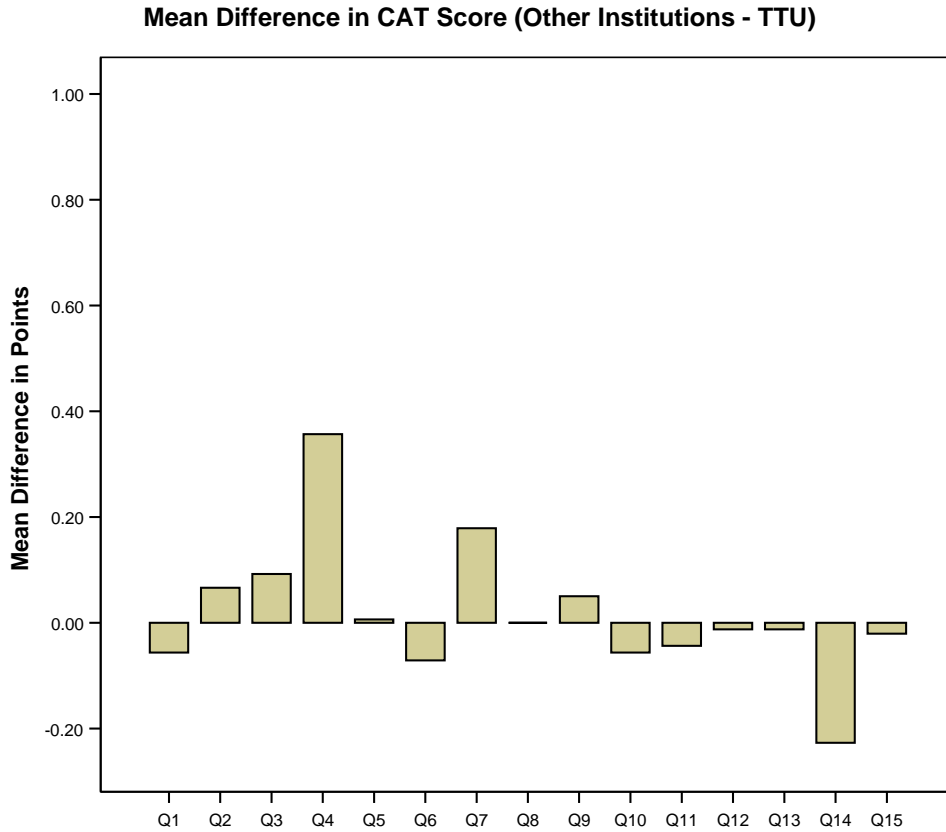
Partial support for this work was provided by the National Science Foundation's CCLI Program under grant 0404911.

**Project CAT**  
**2007 -2008 Activities & Findings During No Cost Extension**

## **Instrument Refinement**

Table 1

Figure 1  
Overall Difference in Mean Scores given by Institutions and Follow up TTU Scoring



In general, errors tended to equalize when summed across questions and averaged across the twenty tests sampled from each institution.

### **Madisonville Community College Scoring Sessions**

This institution was the first to conduct their own scoring session after having invited us to lead a scoring session at their institution last year. We were particularly interested in whether this institution could lead a scoring workshop themselves after watching members of the project team lead a workshop on their campus. The qualitative reports we received about their own scoring session were very encouraging. We also met with an interdisciplinary group of faculty from that institution to discuss ways of using the CAT instrument as a model for building active learning tasks that would improve students' critical thinking.

We also examined a random sample of 20 tests from each scoring session to evaluate scoring accuracy. The average test score in these samples was about 15 with a range of 5 to 28. The results of this analysis were also very encouraging. The overall mean score in both sessions differed by less than 0.33 points from the score assigned by experienced TTU scorers. Individual question scores (see figures 2 and 3) differed 0.2 points or less from TTU scores in both sessions. These findings provide strong support for the idea that other institutions can learn to lead reliable scoring workshops at their own institutions after training by our project team.

Figure 2  
Scoring Accuracy I

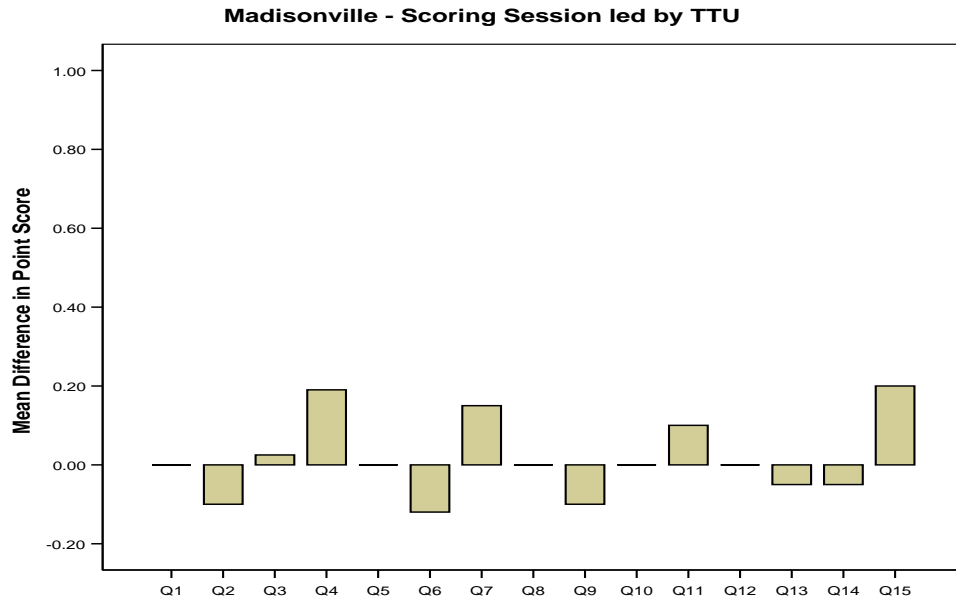
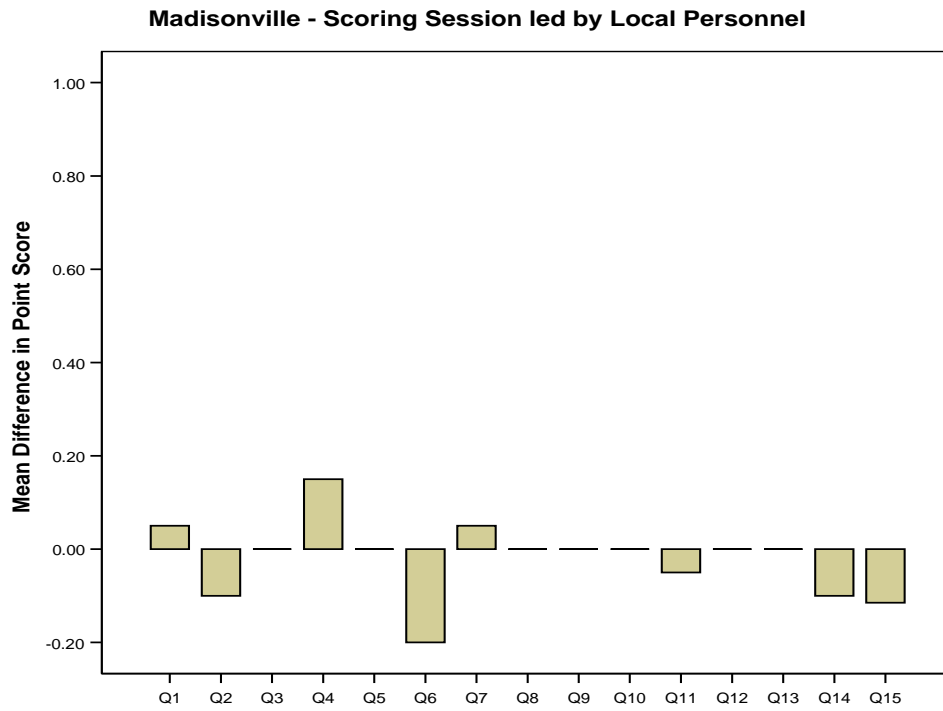


Figure 3  
Scoring Accuracy II



## **Summary**

The project has met or exceeded all goals. The previous annual reports have described in detail the specific accomplishments in a cumulative fashion. The CAT instrument and scoring guide have been tested and refined with input from faculty and experts across the country. The