

Abstract Submitted
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Rasch Analysis of Student Responses to the Colorado Learning Attitudes about Science Survey XI TANG, DAVID DONNELLY, Texas State Univ-San Marcos — The Colorado Learning Attitudes about Science Survey (CLASS) stands out for its strict items design and good performance in real investigation among all the students' science attitude assessment tools. However, we think comparing with the traditional data analysis method, the Rasch Model can help reveal new information from CLASS. To verify our hypothesis, we applied CLASS on partial Texas State University during 2010-2014. We have 652 participants from 15 sections of PHYS 1310 (General Physics I) and 385 participants from 10 sections of PHYS 1320 (General Physics II). All the participants finished this written survey during their class time. We will analyze the data by both the standard analysis tool created by University of Colorado and WINSTEP software (a Rasch Analysis software). After all the data analysis, we will compare the results we get by two different methods. This is the first time applying Rasch Analysis on CLASS data. If we prove Rasch Model is a proper way to analyze CLASS data and it is able to dig out more information from the data, it will provide the academic field a new angle of thinking of CLASS data and even CLASS itself. On the other hand it can help us to have a more comprehensive understanding of students' attitudes to science.

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