December 17, 2013

P. K. Raju 
Journal of STEM Education, Editor

Thomas Walter Professor of Technology Management
& Director of Auburn Engineering Technical Assistance Program
Mechanical Engineering Department

Auburn University

Dear Professor Raju,

Attached, please find my manuscript, “Examining the Relationship of Scientific Reasoning with Physics Problem Solving,” submitted for your review and consideration for publication in the Journal of STEM Education.

The article uses the Taxonomy of Physics Problems as a framework to compare scientific reasoning abilities with problem solving skills in students taking an introductory physics course. This taxonomy provides a basis for establishing critical thinking and cognitive process levels upon which to categorize student problem solving abilities. This study is a follow-up of previous research comparing reasoning abilities with problem solving skills specific to algorithmic and conceptually-based problems. Therefore, this current article uses some of the same previous literature. However, I assure you that new information has been included to provide a foundation for this new research. The manuscript for the previous study was accepted for publication by the Physics Education Research Conference Proceedings July 17-18, 2013, and is currently in publication.

In submitting this 25 page manuscript to the Journal of STEM Education, I warrant that it is original work, has not been previously published in any form, and is not currently under consideration elsewhere.

Correspondence concerning this submission can be sent to:

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Thank you, in advance, for your time spent in review and consideration of my manuscript. I look forward to hearing from you.

Regards,

Carol Fabby