



**Volume 35, Issue 3**

**Fall 2008**

# Iowa Science Teachers Journal

## Table of Contents

### Editorial

Improving Practice: Wishful Thinking or Determined Practice?  
*Jerrid Kruse, ISTJ Editor* .....page 2

### Featured Articles

Professional Development: The Need to Assess Yourself  
*Michael P. Clough* .....page 3

Eyes on your Classroom: Collaborating with Others to Improve Your Practice  
*Jesse Wilcox* .....page 7

Are Questions Enough?: An Action Research Investigation to Analyze the Effect of Questions and Non-Verbal Behaviors on Student Responses with Suggestions for Improving Practice  
*Ben Herman* .....page 12

Aerobic and Anaerobic Respiration: Inquiry Compared to Traditional Pedagogical Approaches  
*Sarah A. Sanderson, Tanya Gupta, Kimberly A. Penning* .....page 17

**Editor**  
Jerrid Kruse

**Associate Editor**  
Dr. Michael P. Clough

**Managing Editor**  
Joe Taylor

**DISCLAIMER:** Experiments, laboratory exercises, lecture demonstrations, instructional settings, and other descriptions involving the use of chemicals, equipment, and instructional methods are presented in this journal as illustrative and directed at qualified science teachers. Manuscripts are reviewed to monitor the safe use of chemicals, materials, and equipment and to encourage the safe selection of instructional settings and methods, however the Iowa Academy of Science and Iowa Science Teachers Section does not assume any responsibility for the use or recommendations made in its published materials. Before implementing any materials published in this journal, users should carefully read all directions, consider all safety concerns, and make appropriate decisions based upon the age and abilities of the targeted audience. The user of any published materials from the Iowa Science Teachers Journal agrees to hold the Iowa Academy of Science and Iowa Science Teachers Section harmless and waive any and all claims against the Iowa Academy of Science and Iowa Science Teachers Section, their officers, directors, editors, reviewers, members, employees, attorneys, agents, successors and assigns, resulting from any and all liabilities incurred as a result of implementing or attempting to implement any materials and ideas described.