

## **A READABILITY ANALYSIS OF ELEMENTARY LEVEL SCIENCE TEXTBOOKS**

**Name: Robyn Trainer**

**Sponsor: Dr. David Kumar**

**Applicant's e-mail address (optional): rlt@trainergroup.com**

This study analyzed the readability levels of the most recent previous editions and the current editions of certain third grade and fifth grade science textbooks by focusing on the average number of words per sentence, the average number of syllables per sentence, the average number of words with three or more syllables per sentence, the average number of difficult words per sentence, and the average number of sentences per page.

An exhaustive literature review was conducted which included research conducted in the areas of textbook analysis and textbook readability levels, articles written by experts in the fields of textbook analysis and readability, and findings from recently published books. Based on the information gathered during the literature review, the study examined the readability levels of elementary level science textbooks that were published by six major textbook publishers.

Results from the study revealed that when used properly, readability formulas provide an objective look at textbooks. After applying these formulas to the selected elementary level science textbooks, it became clear that very few changes were implemented between the most recent previous editions and the current editions.

The findings from this study will help science textbook publishers and textbook writers see that some changes need to be made in the way their textbooks are written. In order to maintain a competitive edge in the global marketplace, more students need to become scientists. In order for more students to become scientists, they need to pursue science degrees. In order for them to pursue science degrees, they need to have a certain degree of confidence and level of interest in the subject matter. In order for that to happen, science textbooks need to be more inviting, more user-friendly, and more interesting to the readers. This study concludes with recommendations for further research.