# Incorporating Literature into the Science Classroom

## Background

Integration of subjects is a major goal within the classical education model. This project sought to integrate age-appropriate into an elementary homeschool co-op class's course work to determine if doing so had an effect on **student performance and student attitudes**. It also assessed **parental attitudes**, in particular the extent to which the intervention assisted them in integrating literature and history into their science instruction and how they felt about that.

## Treatment

Students engaged in an 8-week human body unit received instruction that was modified to incorporate 10-15 minutes of interaction with literature related to the body system and organs being studied and also received literature to interact with during the week.

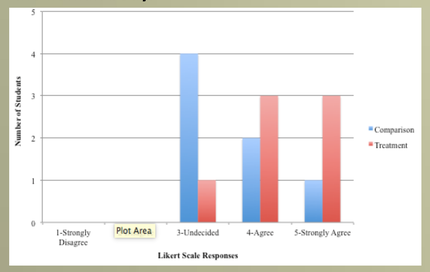
## Results

Learning outcomes, as documented by weekly quiz scores, showed a slight, but insignificant, positive change with the treatment, averaging 92.9% during the comparison period and 94.6% during the treatment.

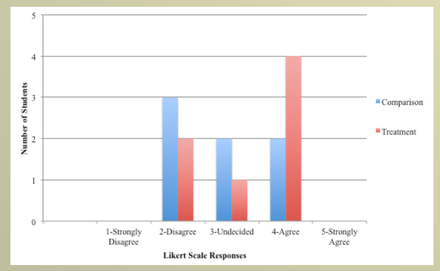
All student interview and survey questions aimed at assessing attitudes toward science showed positive trends with the treatment.

Parent interview question responses pointed to value of intentionality in guiding their children's interactions with literature. Parents appreciated the increased level of interest and engagement their children experienced with the content when additional, non-structured time was set aside each week to intentionally interact with the books provided.

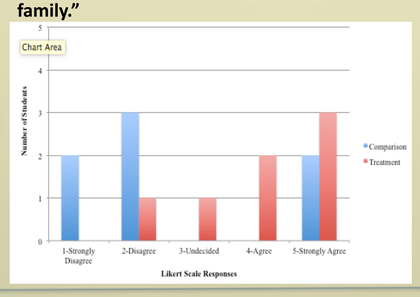
**Student survey responses to: "I enjoyed studying the human body."**



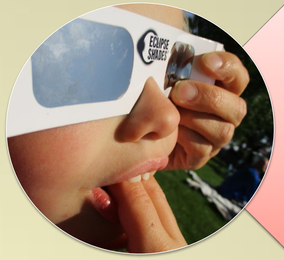

**Student survey responses to: "I remember everything I learned about the human body."**




**Student survey responses to : "I talked about our human body science lessons at home with my family."**




## Study Questions & Data Collection

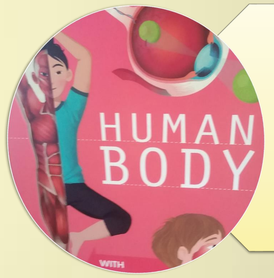


How does integration of literature affect learning outcomes?

Data Collection Tools: Quizzes, Student Interviews, Student Surveys

How are student attitudes affected by integration of literature?

Data Collection Tools: Student Interviews, Student Surveys




How are parental attitudes toward science instruction affected by integration of literature?

Data Collection Tool: Parent Interviews

## Interpretation, Conclusion & Value

Intentional, systematic inclusion of trade books in science instruction increases student engagement and encourages positive attitudes toward the content.

Future studies with mixed-age groups should include quantitative assessment tools better suited to the varying age groups' developmental levels.

Future studies should build upon the model used in this study to assess affects of integration of historical material into science instruction.

Linzy Browning Bozeman, MT

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