Idea Density Correlates with Prior Knowledge

## **Chanel Johnson**

Department of Mechanical Engineering, Purdue School of Engineering and Technology

It is widely accepted in educational research that student's prior knowledge influences new learning. It is easier to comprehend text and content on that particular subject because of the students prior knowledge. If the person does not have any knowledge on the subject, how can a person process the information given?

The concept of idea density deals with the measurement of texts, and is a subset of conceptual density. The formal definition states "the number of propositions divided by the number of words" (Covington, 2008). The idea density of a text determines the amount of work a reader must do in order to understand it. Readers who are already familiar with a subject can comfortably process text with high idea density than a person who is new to the field. The purpose of this research is to determine whether and to what degree is idea density an indirect measure of the amount of presupposed knowledge. The authors will conduct a series of experiments and collect data. The goal is to analyze the data and determine if conceptual density has any affect on learning.

Mentor: Jomo Mutegi, IU School of Education, IUPUI