*Research readings*

*1-2 page response identifying the point of view, the findings and the conclusions of the readings from the research handbook.*

1. **Methods of Automated Text Analysis**

The article discusses the implications for analyzing texts using computer based methods. Questions that arise from a quick overview of the chapter headings include: *What are the uses of these methods, who does it help, and what else can be done to aid in its use for education?*

Methods of analyzing text include:

* Structures
* Functions
* Representations

The article covers the following:

1. Historical background from 1970 – 2000

1. Current theoretical and methodological trends
2. How do text analysis systems score for accuracy and reliability
3. How do these tools that assist researchers and practitioners

Automated text analysis breaks text into the basic units of meaning, known at propositions

* 1. Events
  2. Actions
  3. Goals
  4. States (of being)

1. Defines predicate- verb, adjectives
2. Argument- noun, proposition

The rhetorical structure is represented by the following

Setting + plot + moral (much like the crafts of fiction, nonfiction)

Artificial intelligence can only know so much or a **shallow** comprehension.

Who, when, what, where

**Deep** comprehension looks at the why, how, what if, and so what?

Understanding a text relies on the reader benefitting from prior knowledge that allows for deeper understanding. The nuances of the text depend on memory, also ‘reading time,’ and influences.

Comprehension is a transaction between the author and the reader through the medium of text, as opposed to extraction of language codes and meaning

Modern developments appear in our daily lives as search engines, such as Google, are able to examine large bodies of text and ‘idea nodes,’ and then provide results based on this purely statistical analysis.

One obvious bonus for students, as cited in the article, is the immediate feedback that automated analysis can provide a student thus prompting more time spent on revision. *Is this really helpful to the student writer?*

In order for the system to function well, it must be able to closely match the human analysis of the same type of text. This relates to the reliability of the system.

* Segmentation
* Classification
* Linking
* Rating

Conventional methods can determine text difficulty by acknowledging a ‘readability formula.’

* Word length
* Sentence length
* Word frequency—how often the word appears in the larger unit of ALL words. The more frequently it appears, the more common the word and vice versa

However, artificially shortened words and length of sentences can definitely impact meaning.

Other ways to look at words include polysemy- sense of the word (e.g. bank)

* Hypersym- level of conception (table has 7 levels)
* Concrete vs. abstract

The current rate of accuracy of automated text analysis is just 80%. However, with new developments, the usefulness of this system may be useful. For one thing, it will more closely pair the reading levels of students with text so that the student can be challenged but not frustrated and therefore continue to progress at a positive rate and direction.