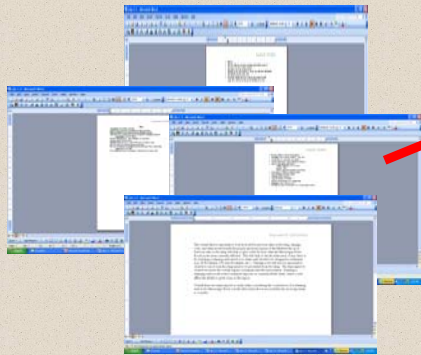
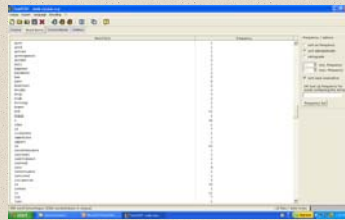


Development and usage of an alternative methodology for analyzing large quantities of qualitative data for engineering design tasks

Jennifer Light, Lewis-Clark State College; University of Washington Center for Engineering Learning and Teaching



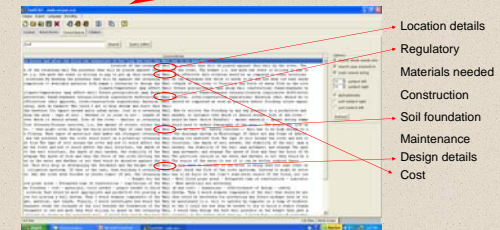
Student responses are transcribed and saved as Word or text files, misspelled words corrected, transcription marks removed, and any symbols changed to words.



Responses are aggregated into groups creating a corpus and opened in TextSTAT. Word frequency is run for each group.



High frequency words are analyzed using "concordance" to identify categories. From categories themes can be developed or groups of high frequency words can be analyzed for usage and context.



- Location details
- Regulatory
- Materials needed
- Construction
- Soil foundation
- Maintenance
- Design details
- Cost

Using selected high frequency words, categories for word usage can be created and coded, followed by a theme development for the data set similar to a constant-comparison qualitative theme development.

