Title: Using Self-Coding Text Analysis Software to Evaluate Student Coursework

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Abstract:

Session Learning Outcomes

By the end of this session, delegates will be able to:

See how to use the software program “Alceste” as an evaluative tool and when it is most appropriate

Evaluate briefly a corpus of electronic text (in the order of 50,000 to 100,000 words) that they or others have brought to the workshop

Session Outline

Key issues to be addressed are:

Qualitative analysis of text classically entails a laborious process of manually assigning codes to sections of text to separate out meaning from the mass of material. Often studies have entailed interviews or focus groups that have to be transcribed first. However, many students, especially those who are post-graduate and distance learning submit their coursework electronically. This is the case at Bedfordshire where students studying for the PGCert in Dental Education, which started in October 2008, will be required to submit a reflective portfolio electronically. The tutors would like to investigate this coursework as soon as it submitted so that an evaluation of the impact of the course can be monitored closely. The software “Alceste” using a mathematical coordinate theory based on word counts and relationships is able to automatically derive categories in a corpus of text and highlight a exemplar sentence that characterises the category, and give a graphic representation of common words used. This provides a very rapid insight into content of large volumes of text (50 – 100,000 words taking only a few minutes to analyse). A distinct advantage of using this analysis is that the categories are not based on suppositions of meaning used by a researcher but simply on objective word counts and relationships within the text. The software is French and relatively unknown in the UK. Various worldwide journal articles enthusiastically report on its use, but this is limited in the UK to a few research papers from the London School of Economics (LSE). The workshop provides an opportunity for participants to view the display of results Alceste offers for the collection of PGCert Dent portfolio text for all students to date and help interpret these. As Alceste produces such rapid results, individual participants are invited to bring with them a corpus of text which can be analysed immediately in the workshop for exploration by all the other participants.

Handling of text materials

To ensure that matters of confidentiality are maintained, reassurance can be given that results appear in a graphic representation form that is anonymised except for a representative sentence for each class that the software characterizes. It is recommended that materials, submitted for analysis, should have identities removed prior to analysis, as is common qualitative analysis practice. Also, the person analysing can look at the results privately first and decide what can be shared in the group.
Session Activities and Approximate Timings

References on Alceste will be available on a download site prior to the workshop. Potential participants for the workshop may send in a corpus of text (preferably in the order of 70,000 words) to a designated site for analysis at the workshop, or bring it in on the day. It must be in .txt format not in a word processing format such as .doc or .rtf. Text will be chosen from that available based on suitability for demonstration at the workshop and there can be no guarantee that any text will be analysed on the day.

Plenary Introduction to Text analysis and the reported use of Alceste and development of the PG Cert Dental Ed Programme. Brief introduction to analysis of PGCert Dent findings at Bedfordshire

10 minutes

Small group work Interpretation of results from Bedfordshire print out 15 minutes

New data analysis Interpretation of results from individual participant’s data print out whilst small group work is taking place

Small group work Further interpretation of results from new data analysis 15 minutes

Plenary Conclusions drawn from use of Alceste 5 minutes

References


Yager EM 2007 Measuring Rhetorical Leadership: A Textual Analysis of Margaret Thatcher’s and Ronald Reagan’s Speeches Annual Meeting of the American Political Science Association Chicago August 30th-September 2nd, 2007