

EXPANDING THE USE OF TEXT ANALYSIS TOOL—QUANTEXT—ACROSS 4 FACULTIES



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Quantext designers were trying to build a tool that captures the dialogic nature of teaching and learning—and enables the teacher to make the dialogue visible through data. They wanted to enable teachers to engage with the language students are using, reflect on it in the context of the language teachers are using, and use those insights to adapt our teaching

Intention
Parallel, Cross-Faculty-informed experimentation to learn from each others' approaches and experiences to increase the range and speed of innovation

Covid Derailment
3 strands cancelled (Tsai, Whittaker, Withy) and 2 strands delayed
QUANTEXT developers unable to update/develop software to support specific projects

Adaptation
Funds used for vouchers for students for anonymous feedback, and research assistance for analysing data

TONI BRUCE: ENHANCING FEEDBACK AND FEEDFORWARD FOR TEACHING AND LEARNING WITH QUANTEXT IN A GENERAL EDUCATION COURSE

Intention: Use Quantext to provided class-wide feedforward and develop individualised feedback as requested by students in previous course. Covid Derailment: Prevented developers from creating individualised feedback tool. Software changed and Quantext lost ability to provide a key feature—word use visualisations. Adaptation: Had to limit focus to class-wide feedback on Reading Ease Scores, which reveal the complexity of student writing. Combined data with results from 2019 Seed Grant Focus Group with 24 students.

I used a mix of short, free-text questions to determine their understandings of concepts on weekly quizzes. Each week, I provided a summary of writing levels for answers to different kinds of questions: personal stories, translating research into their own words, and application of concepts. Mean words and sentences per response were also used to identify expected levels of detail.

In 2019, I had presented the Visualations (Fig. 2) and then to used them to explicitly summarize the main patterns: this helped identify and discuss common or unexpected themes in their responses, and to connect their answers directly to the lecture and reading content (Fig. 3).

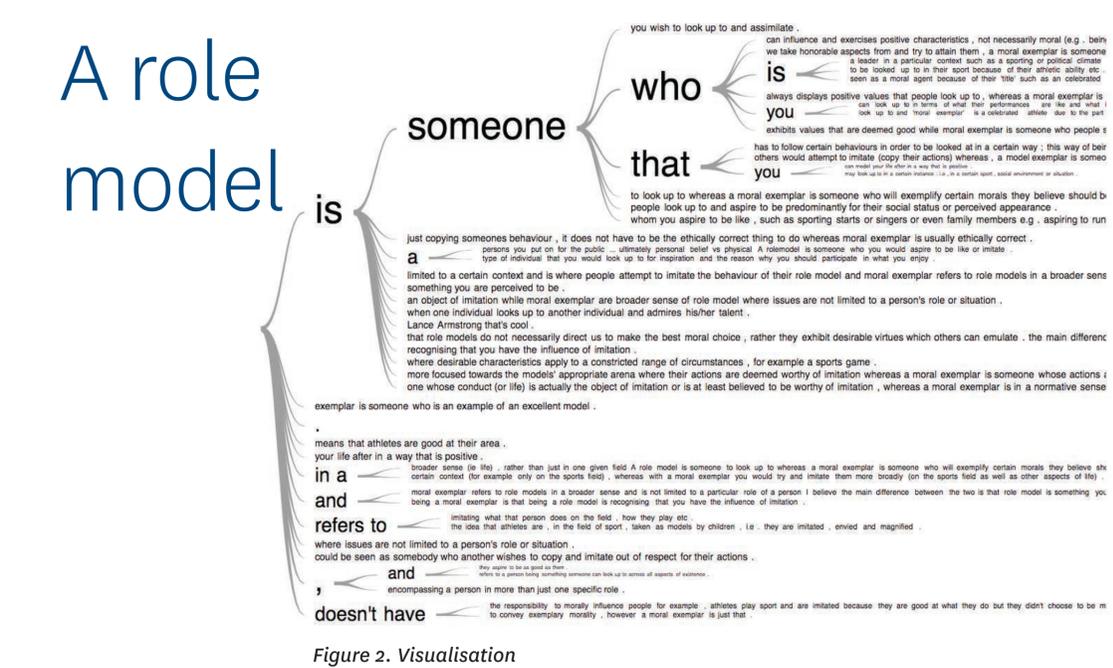
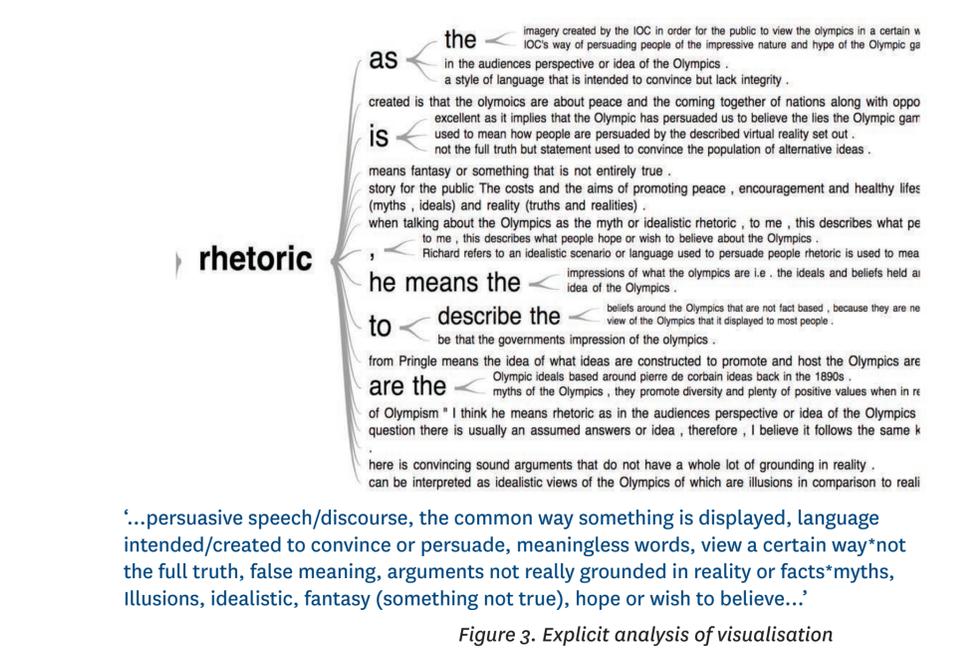


Figure 2. Visualisation



‘...persuasive speech/discourse, the common way something is displayed, language intended/created to convince or persuade, meaningless words, view a certain way*not the full truth, false meaning, arguments not really grounded in reality or facts*myths, Illusions, idealistic, fantasy (something not true), hope or wish to believe...’

Figure 3. Explicit analysis of visualisation

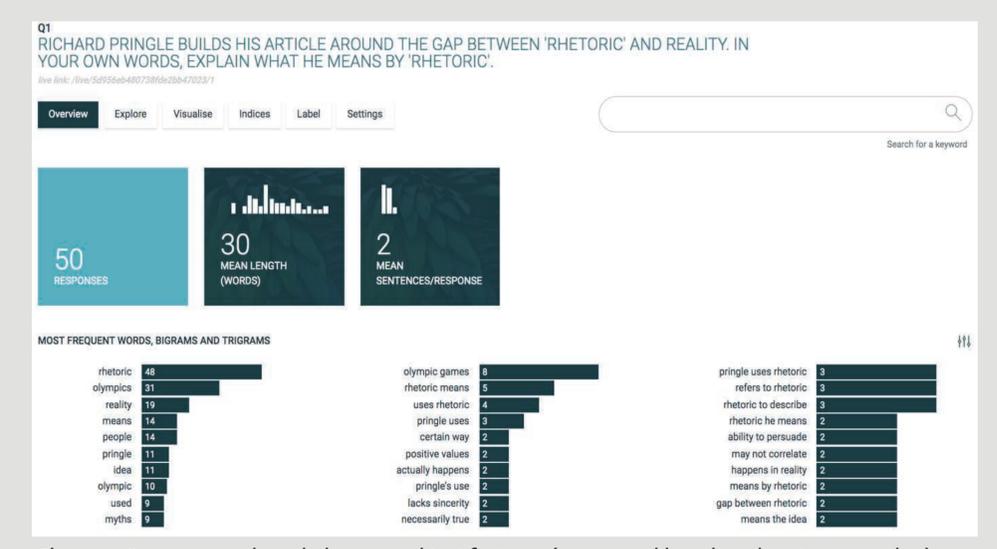


Figure 4. Common words and phrases and text features (mean word length and sentence number)

MEASURE	Q4. In your own words, in one sentence explain what you think the authors mean by the statement that "Every stadium event is a historical experience."	Q5. Describe 1 stadium where you experienced a sense of history, or where one of senses was engaged intensely. Immerse us in the experience	Q9. Give one example of narcissism in your experience of watching sport and explain why it is an example of narcissism	Q10. What concept or ideas confused you or do you want me to explain further in lecture
Flesch Reading Ease Score Higher #: simpler, more direct Lower #: more complex	38.26	69.06	58.9	9.88*
Average words per response	42	98	61	16
Average sentences per response	2	5	3	1

In 2020, my use of Quantext was limited to the Weekly Reading Ease Score and text features. I explained that I was experimenting with a new tool and tried to link the results directly to my expectations for their quiz answers and the major assignment, which requires two very different writing styles (creative storytelling and comparison to research): students present a personal story related to any course topic, and then connect their individual experience to a larger social issue using research.

RESULTS

Semester 2 2020:
Anonymous survey (65% of students): 100% said keep the weekly summary report
Relatively even split between students who identified it as useful or mildly interesting

Feedback indicated it was valuable for understanding the benchmark, standard or level of writing expected for each type of assessment. They liked knowing that different kinds of writing and complexity were expected for different assignments. They saw my use of the weekly summary to explain what I expected as being valuable for their learning.

"Examples of writing styles helped me to formulate better ones" (2020 student)

"it offers a perspective not usually given about student writing" (2020 student)

"I found them interesting and I found myself using them" (2019 student)

When Toni used it to explain [diverse writing styles] I found it helpful" (2019 student)

CONCLUSIONS

Focus groups, survey and informal conversations in 2019 and 2020 reinforced my interpretation that

- these tools were interesting but not vital to most students
- the reading ease scores should be personalized in order to be more useful

We were all excited about exploring the possibilities of Quantext to enhance our teaching and student learning. Unfortunately, Quantext has not survived COVID so our learning with this tool cannot develop further.