



**eAssessment
Scotland** ●●●
2010 Marking the Decade

Presentation and Workshop Submission

Deadline: June 1st, 2010

Your submission will be judged by the conference committee, with a final selection announced on July 1st. Presentations, posters and workshops will be offered under the following themes:

- How e-Assessment has been successfully implemented within my institution
- Perspectives from the front line - staff and candidates speak out
- Emerging trends, techniques and tensions connected with e-Assessment

Submissions will be accepted for:

- 30-minute presentations (including Q&A)
- 45-minute hands-on workshops (Windows PC Lab available 20 spaces)
- Posters (A2)

Please complete the form below (abstracts are limited to 300 words)

Name: Dr Jessie Paterson
Position: e-learning and IT advisor
**Institution
/Organisation:** University of Edinburgh
Format: *presentation or poster*

Abstract:

This collaborative, explorative project between the School of Informatics and School of Divinity has been investigating the possible role of computational linguistic techniques in assessing defined quality criteria in undergraduates' written work. While a number of systems have been created over the years that attempt to assess student written work these tend to rely heavily on having available a large number of essays to train the system. For our work we wanted something simpler and easier to use. This paper will present the results of our preliminary work.

For this project we chose one level 10 course in the School of Divinity, taking the data from two years work, each year being for a different cohort of students. The students were asked to write both a traditional essay and also participate in a collaborative wiki of three students with each student contributing a defined unit of text as well as contributing to the whole.

The first phase set out to define the quality criteria for each of the formats. This exercise identified:-

- While there are some overlaps, the stylistic requirements of each required different criteria
- The process of defining the criteria identified the key components used in subjective marking
- The quality criteria were split into "deep" and "shallow" criteria including the use of references (primary, secondary), grammar/style, terminology (use of higher order words, level of word repetition etc.)

The second phase of the project is looking at how these criteria can be incorporated into computational linguistic systems. This includes the use of techniques like natural language programming techniques like LT-TTT2 pipeline (<http://www.ltg.ed.ac.uk/software/lt-ttt2>) as well as Latent semantic analysis (LSA).

In the future, we hope to investigate the creation of a tool based on such criteria for giving students early formative feedback on their work.

Please send completed proposals to postbox@e-assessment-scotland.org