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Automated Essay Scoring Feedback (AESF): An Innovative Writing Solution to the Malaysian University English Test (MUET)

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Abstract: Recent advances in information communication technology (ICT) infrastructure can be harnessed to support and improve the quality of teaching and learning of English writing skills especially for second language context where rule based support is necessary. Essay writing is indeed the most demanding task to both teachers and students. From conducting the class to assigning of task as well as marking and providing feedback by teachers whereas from drafting essays to final submission and resubmission of essays by students require on-going iterative cycles to facilitate improvement. However, a common scenario is that the iterative process takes too much time, thus resulting in limited practise. An innovative solution to imitate such process is via the Automated Essay Scoring Feedback (AESF). AESF is a networked tool that has the ability to score and provide feedback to students' essays instantaneously. With the speed that exceeds human ability and accuracy of a human scorer, it is hoped that AESF can increase the frequency of essay writing in the class that eventually result in improvement in students' performance. This paper aims to highlight the novelty and rationale of having AESF, its design and features as well as how this tool can be blended into the writing classroom, particularly for the Malaysian University English Test (MUET) extended essay writing.

Keywords: automated essay scorer, paragraph scoring, feedback, networked

1. Introduction

Harnessing computational methods in essay marking is no longer a new issue and is being greatly expanded to large scale assessment including SAT, GRE, TOFEL and GMAT (Attali, Burstein, Russell, & Hoffmann, 2006). Automated Essay Scorers (AES) dated as early as 1966 by Professor Ellis Page with Project Essay Grade (PEG) (Page, 2003) and thereafter, Criterion (J. Burstein, Chodorow, & Leacock, 2004), Intelligent Essay Assessor (IEA), IntelliMetric ("IntelliMetric® | Vantage Learning," n.d.) and many more probably unpublished or in the process of being published. AESF is an example that slowly makes its way to be noticed and introduced in to the Malaysian classroom. Automated Essay Scoring Feedback (AESF) is a web-based instructional writing tool that can score and provide feedback to submitted essays instantaneously as demanded by users targeting at students at the pre University stage. AESF is trained based on the Malaysian University English Test and is hoped to simplify teachers' task and improve students writing ability by on-going and sufficient practice as they needed. The novelty lies in teacher autonomy, student autonomy, cultural sensitivity, and paragraph level grading. It employs Natural Language Processing (NLP) and Machine Learning (ML) for automation.