

Abstract AMEE

Unravelling language use that determines the quality of narrative comments in ePortfolios: a text analysis approach

Sofie Van Ostaeyen, Orphée De Clercq, Mieke Embo, Tammy Schellens, Martin Valcke

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Background

Narrative comments reported in ePortfolios allow to ground competency assessment and development during workplace learning in healthcare education. However, not all narrative comments are considered effective^{1,2}. The present study is a first step in exploring whether automatic text analysis could support the authors of narrative comments. Therefore, the aim of this study was to determine whether high-quality narrative comments can be characterised by certain language use.

Summary of work

A two-stage study was set up. In the first stage, 2,348 narrative comments retrieved from ePortfolios of 149 Flemish (Belgium) healthcare students were manually labelled in the annotation platform INCEpTION³ according to four quality criteria (performance, judgment, elaboration and improvement). To ensure reliability, the codebook used was tested by three researchers and a subset of the comments (n=100) was double coded by two researchers. In the second stage, these comments were analysed using the Linguistic Inquiry and Word Count (LIWC) tool⁴. This software quantifies language use along multiple lexical dimensions. These dimensions can be summations or percentages of words that match available LIWC dictionary categories.

Summary of results

After the first study stage, 29% of the comments were labelled as of low quality (meeting none or one criterion), 56% as of moderate quality (meeting two or three criteria), and 15% as of high quality (meeting all four criteria). The results of the second study stage reveal that word count is the single lexical dimension which can be associated with quality differences. The LIWC dictionary categories did not vary across low-, moderate- or high-quality comments.

Discussion, Conclusion

Our results showed that word count was the only lexical dimension that differed across the quality levels, which does not really offer insights into language use. This suggests potential shortcomings in the currently available dictionary categories. More specialized dictionary categories might be needed to identify the unique language use of high-quality narrative comments.

Take Home Messages

- Most of the comments analysed were of moderate quality.
- Word count was the only lexical dimension that could be associated with quality differences.
- Differences were not present when comparing the currently available LIWC dictionary categories while looking at low-, moderate- or high-quality comments.

References

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