

Evaluating Scrollytelling Based Instruction through Aspect Category Opinion Sentiment Quadruple Extraction (ACOSQE) and Semantic Visualization

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Abstract:

This study adopts the Aspect-Category-Opinion-Sentiment Quadruple Extraction (ACOSQE) framework, integrated with visualization techniques, to evaluate the effectiveness of scrollytelling pedagogy in a journalism course. Student feedback was annotated using four semantic elements—Aspect Term, Aspect Category, Opinion, and Sentiment—and visualized via a Sankey diagram and a bar chart. Results indicate a high level of student engagement and predominantly positive sentiment toward the scrollytelling experience. Moreover, the use of interactive visualizations enhanced the interpretability of learning feedback and supported reflective teaching practices. The proposed integration of ACOSQE and visualization offers a replicable model for digital learning assessment and provides empirical insights for future instructional design and educational sentiment analysis.

Keywords:

Scrollytelling, Aspect-Category-Opinion-Sentiment Quadruple Extraction (ACOSQE), Semantic Visualization, Learning Assessment, Journalism Education.