The effects of argumentation training in online peer feedback environment on process and outcomes of learning

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Introduction

Peer feedback is one of the promising educational strategy to improve students' argumentative essay writing. However, resently, researches have indicated that imlicit approach (Scripts and prompts) in online peer feedback environment improved student's academic writing skills, these approaches bring some issues. More resently researches for solving this issues propose explicit approaches (sach as instruction and worked example). On the base, this study investigates the effects of online peer feedback environment with argumentation training on students' learning process (argumentative feedback quality) and outcomes (argumentative essay quality and domain-specific knowledge acquisition) in the field of educational sciences.

Method

The population of the study was all undergraduate students of educational sciences at Kharazmi University in Karaj in which 40 students were randomly selected as a sample and were assigned to either experimental (with training and worked example) or control group (without any additional support) in a pre- and posttest design. They were then divided over 20 dyads and were asked to write an argumentative essay, engage in argumentative peer feedback with their learning partner, and then revise their essay based on feedback they received. In the peer feedback phase, the students of the

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experimental group received on how to write a high quality argumentative essay before giving feedback. To do so, a collaborative e-learning environment was designed and developed. A coding scheme was developed based on research literature to measure both argumentative essay and argumentative peer feedback quality.

Result

The results favoured students in the experimental condition in terms of their argumentative essay writing, argumentative peer feedback quality, and the acquisition of domain-specific knowledge. Furthermore, there was a positive and significant correlation between the learning process (argumentative peer feedback quality) and the outcome (argumentative essay writing quality).

Discussion

The results of this research indicated the importance of argumentation training as a support for peer feedback process in increasing the students' feedback quality, academic writing and domain specific learning. Providing argumentation training befor peer feedback activity can familiarize students with criteria for a higher quality feedback, and thus improve the quality of their writing. Also, high quality feedback requires a more cognitive elaboration of learning material which can enhance student learning in subject at hand.

Keywords: online peer feedback environments, argumentative writing, argumentative peer feedback, argumentation training.