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Can Crossword Puzzle Exercises Facilitate Students' Learning?

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Abstract

Conducting a gameplaying experiment (a crossword puzzle exercise) to verify whether using a crossword puzzle exercise as a learning tool would benefit student learning of economics vocabulary and terminology. As a result, the findings demonstrated that the crossword puzzle exercise can be used as an effective learning tool to facilitate students in learning economics vocabulary and terminology, because the exercise offers students with lively, creative, and challenging learning method. Students learn economics via game-playing, which enhances their motivation to learn the course better and more effectively.

Keywords: Crossword puzzle exercises; Game-playing learning method; Motivation to learn

Introduction and Experiment Design

The game-playing learning method has been demonstrated by numerous researchers [1-7] that it is an effective learning tool to facilitate students' learning. Therefore, in a recent instructional experiment in an economics class, I split students into two groups-- one who used a traditional study-guide and one who engaged in a crossword puzzle exercise. Students in the study-guide group were given a list of terms taken from the course textbook; students in the second group were given a crossword puzzle exercise that included terms and phrases taken from the same textbook and also given to the traditional study-guide group. Students in both groups were not aware that there would be an in-class quiz. Both groups were given forty minutes to use their handouts to prepare for the in-class quiz. Students in the crossword puzzle exercise group were required to submit their completed puzzle to me before the quiz started. The quiz questions were the same for both groups.

Method and Results

At the end of the study, I used statistics (an independent t test) and a survey to investigate whether the crossword puzzle exercise had enhanced students' learning of terms and phrases. Statistical analyses of the results indicated the following:

- (1) Students who used the crossword puzzle handout scored significantly higher than those students who used the traditional study-guide handout.
- (2) According to survey results, the majority of students reported that the crossword exercise assisted them in preparing for the quiz and rated the crossword exercise as an effective tool in building a vocabulary of technical terms.
- (3) The majority of students also reported that the crossword

exercise improved their understanding and knowledge of technology-related terms and that it had been a fun way to learn terms and phrases.

Discussion

These findings imply that using a crossword puzzle exercise may accelerate students' interest in learning vocabulary and terminology and increase their ability to memorize words. More importantly, the crossword puzzle exercise provides students with a lively, creative, and challenging learning method. It's important to remember that students who follow the traditional study-guide method also may learn vocabulary and terminology by rote. This latter learning method may be boring and not as challenging and hence decrease interest in learning vocabulary and terminology and cause them to forget useful terms and phrases. My findings are consistent with other researchers' findings, such as Franklin et al. [8], Weisskireh [9], Berry and Miller [10], and Whisenand and Dunphy [11].

Conclusion

In summary, survey results indicated that the crossword puzzle exercise was associated with game-playing, fun, and recreation. Crossword puzzles offer students opportunities to accelerate their learning by quickly mastering new words and phrases and lead them to more actively interact with vocabulary and terminology as compared to the rote learning method. Overall, the crossword puzzle exercise may be a substantive pedagogical method of enhancing students' learning.

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Conflict of Interest

No conflict of interest.

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