

THE RELATIONSHIP BETWEEN GAMES, LEARNING, AND STUDENT RESPONSES

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Games are seen to be fun, not only motivating but ensuring full engagement, particularly through reflection and discussion, on which constructive learning depends (Booker, 1996). It has been suggested that games generate enthusiasm, excitement, total involvement and enjoyment (Bright, Harvey, & Wheeler, 1985). My interest in conducting research on games stems from a belief that children learn through games, that they are motivated to participate actively in the mathematics classroom when engaged in game playing, and that games contribute to construction of meaning through facilitating communication with others, and stimulating active interaction with mathematical situations.

The research presented was conducted with grade 5 and 6 students (9 to 11 year olds) placed into four experimental groups. Three of the groups played games over different periods of time, with one group engaging in focused discussion of the strategies employed by the students. The fourth group participated in activities that addressed the same mathematical concept as those in the games, i.e., multiplication and division of decimals. The period of the study was 14 weeks and data were collected via: written tests; researcher observation; student conversation; student interview; attitude scale; and student documents.

The preliminary results suggested that students are on task during game playing and engaged in meaningful conversation related to mathematical concepts and strategies. The results of the numeric data suggested that a number of students demonstrated an increased understanding of the mathematical concept measured. The games were engaging, but did not necessarily result in improved performance on a skill test than did direct instruction. It seems that specific teacher actions to support games based learning are necessary.

References

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