



ENGAGEMENT

COLLEGE ACCESS

Evidence in Action

A K20 Center Research Brief

The Power of Application in Learning Life Skills: A Case Study of a Game-Based Learning Approach

Scott N. Wilson, Leslie A. Williams, William Thompson, Elizabeth Kuehn, Jessica E. Black, Sharon Dean, Javier Elizondo, Robert Terry, and Gregg Garn
2020

Introduction

This intervention brief explores the use of game-based learning (GBL) to teach financial literacy, a critical life skill. The authors highlight the growing importance of financial literacy in K-12 education, especially for underserved and first-generation college-bound students. Drawing on UNESCO and OECD definitions, the study emphasizes financial literacy as essential for personal and societal well-being. The literature review supports GBL as an effective instructional strategy, citing its ability to increase engagement, motivation, and learning outcomes across academic and life skill domains.

Methodology

Research Design:

A randomized controlled trial was conducted to compare the effectiveness of a GBL intervention with traditional personal financial literacy (PFL) instruction.

Sample:

The study involved 118 high school students from two rural Oklahoma schools. Students were randomly assigned to either the control group (traditional instruction) or the experimental group (GBL intervention using the MYOB game).

Data Analysis:

Pre- and post-tests assessed financial literacy knowledge. ANCOVA was used to compare posttest scores between groups, controlling for pre-test scores. Effect sizes were calculated to determine the magnitude of learning gains.

Results

Students who engaged with the MYOB game showed significantly greater improvement in financial literacy compared to those receiving traditional instruction. The experimental group's post-test scores were higher, with a moderate effect size ($d = 0.48$). These findings suggest that GBL can enhance student understanding of financial concepts by providing immersive, real-world scenarios that promote strategic decision-making and resource management.



Application into Practice

To replicate the MYOB (Mind Your Own Budget) intervention, schools should integrate the game into their existing personal financial literacy (PFL) curriculum as either a core instructional tool or a supplemental enhancement. The intervention was structured around six mini-units, each aligned with state and national financial literacy standards.

1. In each mini-unit:
 - a. Students played one or more levels of the MYOB game.
 - b. They completed a 5 to 15 item questionnaire assessing knowledge gained from the scenario.
2. Each game scenario simulated a 4-week financial cycle, during which students practiced budgeting, saving, and managing financial decisions.

Teachers should receive a brief professional development session on how to implement the game and align it with their instructional goals. The game can replace traditional activities such as worksheets and textbook exercises, offering a more engaging and applied learning experience. Schools should ensure students have access to computers or tablets and internet connectivity to run the game effectively.

This dosage—six structured game-based learning units—provides a scaffolded, immersive experience that allows students to build financial literacy skills progressively over time.

Work Cited

Wilson, S. N., Williams, L. A., Thompson, W., Kuehn, E., Black, J. E., Dean, S., Elizondo, J., Terry, R., & Garn, G. (2020). The power of application in learning life skills: A case study of a game-based learning approach. In H. D. O'Hair & M. J. O'Hair (Eds.), *The Handbook of Applied Communication Research: Volume 2* (pp. 579-594). John Wiley & Sons.