HOW CAN I IMPROVE THE MATH PERFORMANCE OF INTERMEDIATE STUDENTS USING GAME-BASED LEARNING:

PROJECT

By

LeAnn M. Karl

A capstone project submitted in partial fulfillment of the requirements for the degree of Master’s of Education.

Hamline University

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Primary Advisor: Laura Halldin

Peer Reviewer: Whitney Potvin
My capstone project was the creation, design, and completion of an educational website called gamebaseded.com. This website breaks down the intermediate Minnesota math standards by grade and skill. Games are linked to each standard to assist in game-based learning.

gamebaseded.com
4th Grade MN Number and Operation Standards

Demonstrate mastery of multiplication and division basic facts; multiply multi-digit numbers; solve real-world and mathematical problems using arithmetic.

*Basic Multiplication

Grand Prix Multiplication
Meteor Multiplication
Penguin Jump
Space Race
Submarine Otters
Tractor Multiplication
Math Boat

Figure C.2

Represent and compare fractions and decimals in real-world and mathematical situations; use place value to understand how decimals represent quantities.

*Fractions

Tug Team- comparing fractions
Dirt Bike- Proportions- equivalent fractions
Puppy Chase- Fraction to decimal
Speedway- adding and subtracting like denominators
Bunny Jump- compare fractions
Feed the Fish- ordering fractions

Snow Sprint- Multiplying fractions

Figure D
List of Online Resources Used

http://www.arcademics.com/games?grade=3
http://www.mathpup.com/game-level/5th-Grade
http://www.kidsmathgamesonline.com/numbers/meanmedianmode.html
https://www.mathsisfun.com/data/mean-machine.html

https://www.topmarks.co.uk
https://www.broadoak.n-somerset.sch.uk
http://www.coolmath-games.com/
http://www.mathplayground.com/games.html
https://www.mathgames.com/

http://www.softschools.com/math/games/
http://www.mathgametime.com/grade/5th-grade
https://www.education.com/games/third-grade/
https://www.varsitytutors.com/aplusmath/hidden-picture/division

http://www.sheppardsoftware.com/math.htm
http://www.hoodamath.com/