



## Abstract

Math is one of the hardest subjects for students. If it wasn't worse enough, now they have to learn math at home with some distractions. Recent studies have shown screens from devices can cause headaches, eye strains, and irritated eyes for children. (Patel, 2017) With new COVID-19 rules students are now required to be on the screen around 4 hours every day. This can be boring and make it extremely difficult for elementary school kids to focus. They will be able to enjoy school and learn at a better rate if they are able to play math games because it is fun and engaging. You are taking the classroom activities and giving it to the students for them to do at home. This will help them learn, and they will have fun while doing it.

## Introduction & Research Question

The focus of this study is to help students do better in math by playing different math games. These math games will make learning fun and it will help the students learn more efficiently because they will be more engaged. Playing games encourages strategic mathematical thinking as students find different strategies for solving problems and deepen their understanding of numbers. (Rutherford, 2015) It is important for students to be engaged in lessons because it helps their learning especially while they are online. It can also help students if parents get involved and they start to play different math games as a family as well.

How can you get students to become more engaged with lessons? Especially if it is online?

If students play math games more often during math lessons, then they will learn more because they are engaged.

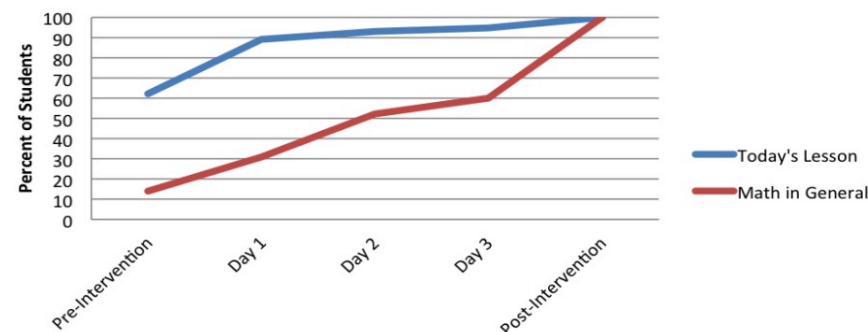
## Research Focus

For my research I used to support my research question was through reviewed journals found in the University of West Oahu library online database. I was able to find a very helpful journal that did a study on students and interviewed them after to see how they liked playing math games. I also did research on the National Council of Teachers and Mathematics website. The articles helped my research question by keeping the students engaged in the lessons.

## Results

In a 5<sup>th</sup> grade class students completed a brief unit on ordered pairs utilizing game-based lessons. Attitude and achievement data were collected mainly by surveys, content tests, student interviews, and field notes. They asked the students questions about how they felt about the lesson, and how they feel about math in general. Before the math games, 54% of students said they disliked math, while 67% students wrote they were bad at it. 83% of students who took the survey circled unhappy, worried, or bored. Around 92% of students' comments and reactions grew more positive every day. By the final day of instruction, one hundred percent of students indicated they felt good or happy about math. (White and McCoy, 2019)

**Percent of Students who Selected "Good" or "Happy" on the Attitude Survey Each Day**



## Discussion

Based on the research, I think students love participating in math games and in the end, it will benefit them. Teachers will be able to incorporate some sort of game in every lesson. Whether we are in person or all online, there is always a way for students to play math games. Even for me as a college I would rather complete an assignment by playing games than doing a lot of different worksheets. Once you get to know your students you will know what types of games they are into and work off that. Overall, there needs to be more games in the classroom. It may be harder to do it now that it is online, but there is always a way.

## Conclusions

- Using math games during math lessons will keep the students engaged in the lesson and help them learn.
- Teachers need to try and implement math games into their lessons.
- Students have fun playing math games.
- Even when the students are online, there are a lot of free websites that teachers can use.

## References

1. Rutherford, Kitty. (2015, April 27). Why Play Math Games? - National Council of Teachers of Mathematics.
2. Patel, D. M. (2019, April 23). Will Technology Ruin Your Children's Development? - Thrive Global. Medium.
3. White, K., & McCoy, L. P. (2019). Effects of Game-Based Learning on Attitude and Achievement in Elementary Mathematics. *Networks: An Online Journal for Teacher Research*, 21(1), 1–17. <https://doi.org/10.4148/2470-6353.1259>