

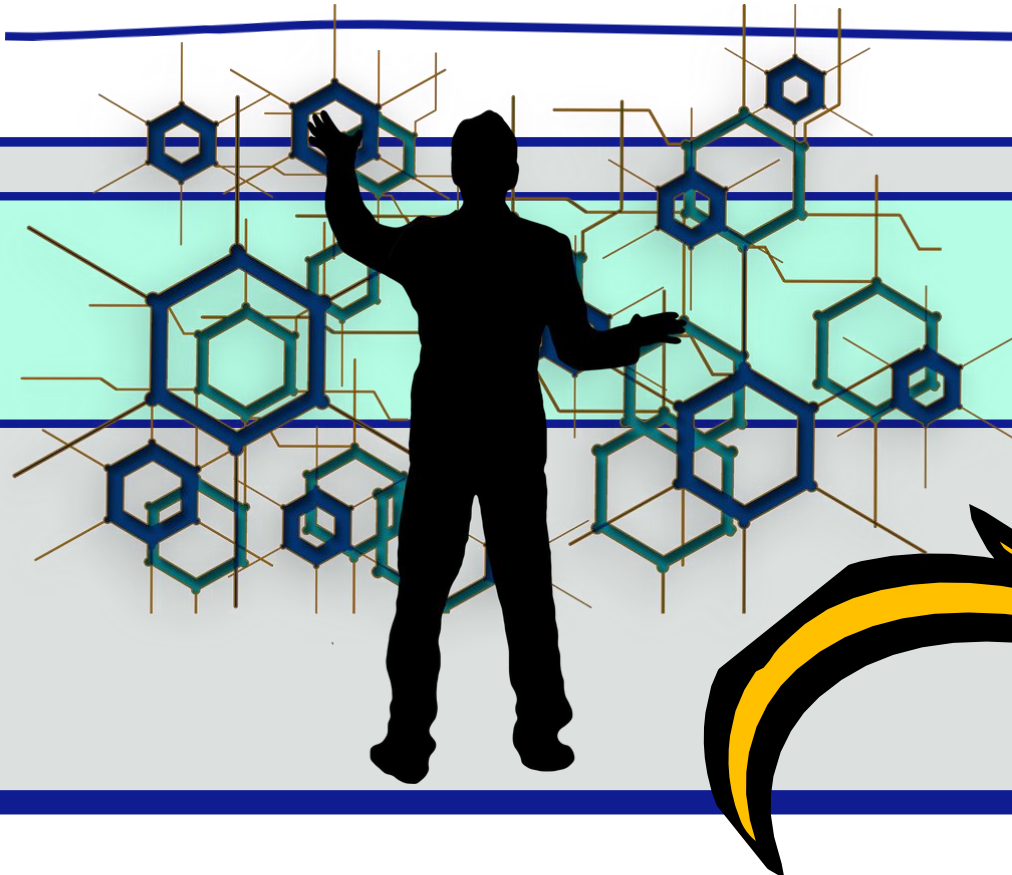
# BLACKBOARD JOURNALS: AN ACTIVE LEARNING TOOL FOR MATHEMATICS

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## INTRODUCTION

### Traditional Math Classroom

**Instructors** - observes non-verbal cues, views Math solutions on the spot, provides instant feedback.

**Peers** - shares Math solutions – peer assists learning - reduces time demanded from teachers

### Virtual Math Classroom

**Instructors** - non-verbal cues behind the screen - increase in online consultation time and reviewing questions with each student.

**Peers** – mostly work in silos - unable to share answers – rely heavily on instructors

### **Problem**

How to increase peer assisted learning and reduce time demanded from instructors? How to ensure that learning is taking place?

## STRATEGIES ADOPTED

One approach that could help **teachers reduce their workload** and at the same time **encourage students' engagement** via the feedback process is through the use of **Blackboard Journals**.

Blackboard journals is a **tool that allows students to journal their work done for every class.**

## METHODOLOGY

Students **submit their weekly tutorial solutions** as a weekly entry on Blackboard journal.

Journals are made **visible to all students**

Able to **compare the full solution** against others' work, and where needed provided **peer feedback**.

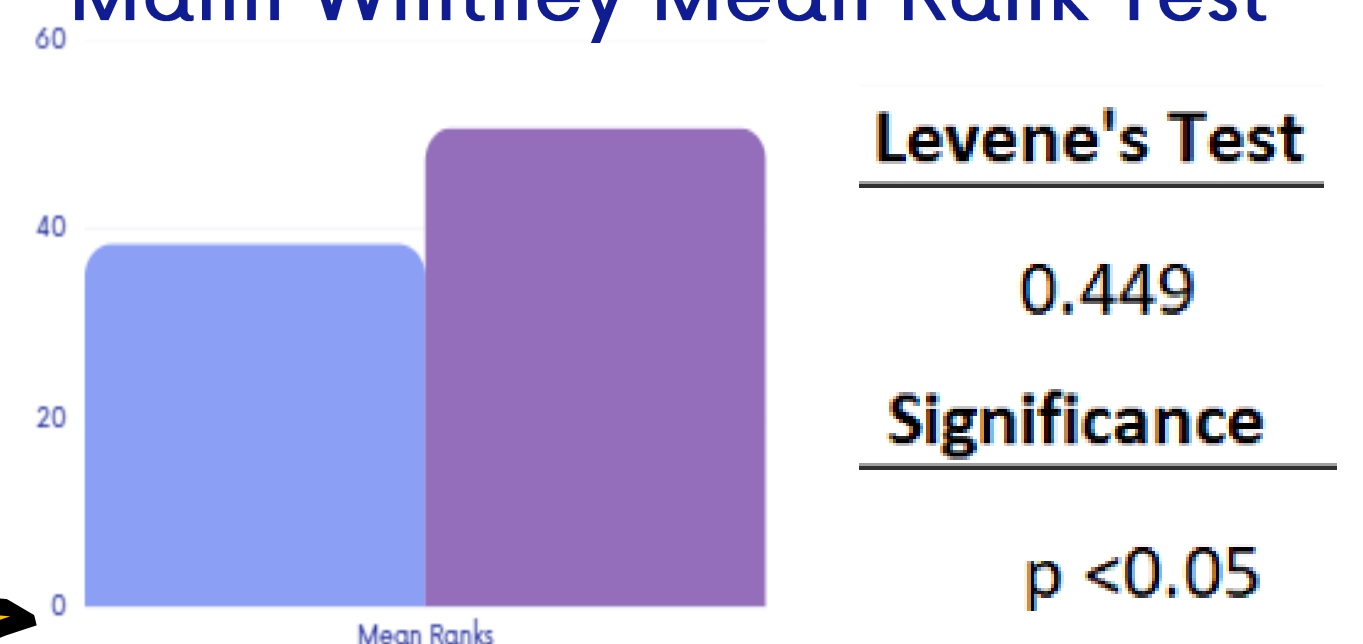
When students were not able to come to a consensus on, - **teachers intervened by providing feedback.**

Using **Blackboard analytics** - investigate the relationship between the number of students' views of these journals and students' achievement.

## STUDENTS' FEEDBACK

- I was able to **view my friends answer and improve my solutions.**
- **Saved time.**
- I was able to **see different methods used** by other students to solve questions
- I am able to **check my answers with peers** and sometimes **discover a new way** of solving the questions.
- I can **see how they interpret formula** to get the answers and if a question answer I'm not so sure about I can check with it. But if I really don't know the steps and am still confused with looking at friends submission then I'll ask The teacher
- Really **good and effective**
- It was **very helpful** for me personally because **can compare answers** and seek for answers if needed **without asking anyone**. Also, submitting the homework was not a hassle at all so I feel like it was a **win-win for everyone in the class**

### Mann Whitney Mean Rank Test



Students **who viewed the journals more often performed significantly better** in the subject compared to those who viewed less

## CONCLUSION

**Blackboard Journal** is a **useful tool** that can be used for **teaching and learning Mathematics.**

This tool **promotes active learning** in a conducive e-learning environment through **peer review** and it is evident that **higher interactivity through these journals can lead to better learning outcomes.**

Moreover, students' find this method very useful especially because it **saved time** from physically seeing the lecturer and got to **compare answers with peers** without being physically present.

### SOME RELATED LITERATURE

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