Real Time Board
Pilot Study Brief

PRODUCT INFO

Product name: Real Time Board

Product description: The Real Time Board is an online repository where student information is stored, including their assignments and school work. The Real Time Board allows for organization of a topic, collaborative learning, and evaluation.

Learning focus: Pre Algebra, Algebra, Geometry, Probability and Statistics. 7-12th grade

Teacher training: Initially, the math team collaborated with the company to learn how to use the Real Time Board. This information was then presented to other teachers for an hour during an optional staff development meeting.

Cost: There is no cost to schools. There is a charge for businesses.

Device specifications: The majority of the students use a touch screen chromebook and the Chrome browser. This has worked well for students. Some students use other types of laptops and desktops. You can write on the board using a mouse and/or keyboard. For some students, they download the worksheets, write on them, and upload them to the Real Time Board when completed. This has been particularly useful for students who have slow internet speed or old technology.

DISTRICT CONTEXT

District demographics: Minnesota Virtual High School serves around 1,000 students, This varies because of the needs of the students and being an online school. About 9% of students identify as Hispanic or Latino, 1.5% as American Indian or Alaska Native, 2% as Asian, 21% as Black or African American, 60% as White, and about 7% as multiple races. 57% of the students are eligible for free and reduced price lunches. About 14% are English learners and about 3% are homeless.

Pilot demographics: One geometry teacher and one probability and statistics teacher used the Real Time Board, with about 200 students involved in the pilot.

PILOT GOAL

Our school needs a tool that organizes and stores student work and provides visuals and interactive online learning opportunities in math, with the intention of increasing student success.

IMPLEMENTATION PLAN

Duration: September 2017 - June 2018

Quality of support: Support came from one math teacher and contacting the company. Throughout this pilot, the company was making the board more user friendly.

Implementation model: This tool intended to be a virtual space for students to complete their work and demonstrate their learning. Teachers designed the lessons and students downloaded the board and uploaded work through their personal accounts. The board allows students to demonstrate understanding by showing their work and lets students check their answers. Similarly, teachers are able to evaluate students' assignments directly on the board.

Data collected: Student assessments were analyzed after some use of the Real Time Board in the first semester. At the end of first semester, we determined that more instruction was needed for students to be successful using the board. For some students, this was a big learning curve due to learning how to work with technology.

In the second semester, we collected assessment data as well as feedback from students. We administered a post survey to measure student, teacher, and parent feedback on the use of Real Time Board.

FINDINGS

Actual implementation model: Real Time Board was utilized in Pre Algebra, Algebra, Geometry, Probability and Statistics. As the semester went on videos were updated. This was used on screen touch chromebooks. Students were able to put information on the board by finger, stylus, typing, downloading the worksheet, writing on it and putting it back in the lesson and/or mouse. The information was in one place for each section so students could easily look back at information learned.

Part time students did not use touch screen chromebooks. Some students downloaded the worksheet, took a picture and added to the board. The teacher was able to write on the students boards to add additional information.

Educator engagement: Two teachers used this tool and are continuing to develop more lessons on it, including the development and addition of videos with clearer instructions for students. During the pilot, the involved teachers gained a better understanding of Google Docs, Moodle, Kami, Chat, and Screencastify. These tools are all compatible with the Real Time Board. Throughout this school year, the Real Time Board was in development and now the product is fun and easy to work with.

Educator satisfaction: The teachers felt that the board is intuitive. The teachers were able to support one another and often answer each other's questions. In the instances where additional support was needed, the teachers were able to reach out to the company for questions and received quick feedback. The educators also felt that the company was receptive to their input and feedback.

Student engagement: When students were asked which tool helped them most in their math classes, most (52.6%) answered the Real Time Board. Most students also stated that the technology was sufficient, though a few (5.3%) stated that they would like to see more videos integrated into the Real Time Board to support them in learning complicated topics.

Student satisfaction: When students were asked what they liked most about the Real Time Board, nearly 50% stated that they found it easy to use and over 30% said it was helpful for the organization of their work. Another 10% found that it was valuable as it enabled them to talk to their teacher and watch how the teacher worked through a problem on the screen while they were speaking. When asked what they would change about the board, nearly half said they would not change anything, while the other half suggested changes such as the integration of more videos and a few other interface-related suggestions. The teachers intend to use this input to improve their Real Time Boards for the following school year.

Student learning: What was learned is the Geometry A students success decreased 14% from Semester 1 to 2. This makes sense because students on track to passing would move on to Geometry B. Geometry B increased by 37%. That would be expected because of students going from Geometry A to B in the same school year. They also had a better understanding of working with the real time board. Probability and Statistics decreased by 11%. This is a 1 semester class and students on track to graduate would work towards finishing the class and not having to repeat it. Based on information from other teachers there was an overall improvement in students passing the classes. I did not have date to compare this year to last year.

OUTCOME

Purchasing decision: Next year, two math teachers will use the Real Time Board, with the possibility of a 3rd math teacher. The Real Time Board allows for different ways to learn and show understanding. In addition to the Real Time Board, the technology committee and the administration decided to purchase Kami. By using these tools along with the Google Suite, the school will provide students with options on how they want to work on their assignments. At this point, the Real Time Board is free for the school. This fall, we will continue to pilot the Real Time Board with more initial instructions to help teachers focus on students who need more information. Similarly, in preparation for the fall, the administration will create all boards at the same time to streamline the onboarding process.

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