

MATH PRACTICE + DIFFERENTIATION in an Urban Classroom Setting



Faced with the challenge of meeting the needs of the most diverse class of students in a decade of teaching, Ms. Sujata Bhatt searched far and wide for a systematic solution that would give her actionable feedback on her students' strengths and weaknesses. In her 5th grade classroom at Grand View Boulevard Elementary in Los Angeles, CA, she differentiated math practice time for her 34 students, some of whom loved math, some who loved to hate math, and others who lacked the confidence to practice using single-digit math facts. After introducing TenMarks to her fifth-graders during the Math Madness challenge, her students "felt like they were part of bigger worlds and could compete in bigger worlds."



Getting Started

When introducing her students to TenMarks, Ms. Bhatt's primary goal was to teach her students how to navigate TenMarks during their periods of independent, self-directed practice. In addition to one hour a week in the computer lab during which her students practiced material taught to them earlier in the school year, Ms. Bhatt's students had access to six classroom computers, an iPad, and an iPod. After explaining how to use the dashboard and how to navigate through album and track assignments, students were encouraged to take charge of their learning by providing them with independent opportunities to complete math practice. In her classroom, she also created a display board for students to share their certificates and successes with others.

Differentiated Practice

After splitting her students into three groups — high performers, low performers and average performers — Ms. Bhatt made sure to schedule one hour a week in the computer lab

Demographics

- 588 students
- Title 1 School
- 88% Hispanic
- 5% Caucasian
- 83% free and reduced lunch

to allow students to review material that they had learned earlier in the school year. Her most independent learners were permitted to work at their own pace and could choose to explore advanced topics, and average students were directed to identify their strengths and weaknesses and to work on them in order to join the more advanced group of independent learners. Students who were very far behind were encouraged to take advantage of extended learning periods — recesses, home — to practice their math skills and catch up with their peers in their own time and without embarrassment.

While students enjoyed working at their own pace to unlock the games within the program, Mrs. Bhatt relied on the data from student reports to identify small groups of students in need of intervention on classroom material. "TenMarks became a place where they could practice them, and then, towards the end of the year, explore things I hadn't taught yet," says Mrs. Bhatt. "TenMarks enabled us to have a single cloud-based mathematical 'home' that we could all access from anywhere, and, because I could

create different classes with different extra albums, I could meet the independent practice needs of all my students.”

“TenMarks was, for me, a path of practice to arrive at the skills that enabled kids to do things in the real world. This upcoming year, I will likely use the reports functions much more. Math is a pretty complex world in my class, and I know TenMarks made a huge difference in my kids’ speed, accuracy and motivation.”

Moving Forward

In addition to using state and district tests to assess her students’ abilities, Ms. Bhatt builds instruction in her classroom using Project-Based Learning techniques. “TenMarks was, for me, a path of practice to arrive at the skills that enabled kids to do things in the real world. This upcoming year, I will likely use the reports functions much more. Math is a pretty complex world in my class, and I know TenMarks made a huge difference in my kids’ speed, accuracy and motivation.”

Student Performance



| | Algebra | | Coordinate Geometry | | Measurement | | Total | |
|----------|---------|-------------|---------------------|-------------|-------------|-------------|---------|-------------|
| | Score | At a Glance | Score | At a Glance | Score | At a Glance | Score | At a Glance |
| Jake | 6/75 | | 15/40 | | 1/9 | | 86/411 | |
| Jill | 12/76 | | - | | - | | 43/270 | |
| Kaitlyn | 9/13 | | - | | 11/15 | | 153/350 | |
| Klara | 4/6 | | - | | 1/4 | | 16/30 | |
| Omar | 19/50 | | - | | 5/14 | | 65/255 | |
| Pierce | 3/7 | | - | | - | | 32/77 | |
| Trevor | 2/2 | | - | | 2/4 | | 30/40 | |
| Veronica | 7/9 | | - | | 4/6 | | 23/32 | |