

### Moving Beyond Math Drills

At Jacks Valley Elementary, a school in Douglas County School District in Nevada, educators were looking for ways to move beyond math drills and fact memorization. They wanted to equip students with tools to effectively and creatively problem solve, especially when faced with non-routine math problems like ones on state tests.

“We knew there were many programs available to our students, but we specifically wanted one that helped with problem solving. Many of the programs we looked at were drill and kill,” says Pam Gilmartin, Principal at Jacks Valley, “Problem solving was the area on our state testing that was the weakest and we needed assistance with looking at math a different way.”

### Leading Students to Creative Problem Solving

Gilmartin and her teachers wanted a program that aligned to their math curriculum and provided deep conceptual understanding, not just a rehashing of the same textbook problems on a computer screen. After exploring several options, they found ST Math®, an instructional software program that fit the requirements.

They were drawn to the way ST Math presents foundational concepts visually with no verbal directions. Each puzzle simply asks students to get Jiji (ST Math’s penguin mascot) across the screen. “ST Math encourages higher level thinking in my students,” says third grade teacher, Mary Kay Dale, “It allows them to work through math problems in different ways.”

She uses ST Math to introduce concepts to her class before she covers them in a lesson. “It’s just like having another teacher teach them,” Dale explains, “The kids are



Second through fifth grade students improved on 100% of objectives in ST Math quizzes

more receptive to new concepts when they’ve already seen them with Jiji.”

Another teacher, Tracie Moultrup, who teaches first and second grade, utilizes data to make sure she catches the exact areas where her students need help, even when they’re not visibly struggling: “ST Math’s reporting helps me track which students are merely making progress through the program and which students are actually learning.” Knowing when to step in has helped Moultrup and her colleagues see marked growth in their students.

# Jacks Valley Elementary

## NEVADA



### District Facts

**District Type:** Public  
**Number of Schools in District:** 13  
**School Grade Levels:** K-5  
**School Enrollment:** 449



### Demographic Breakdown

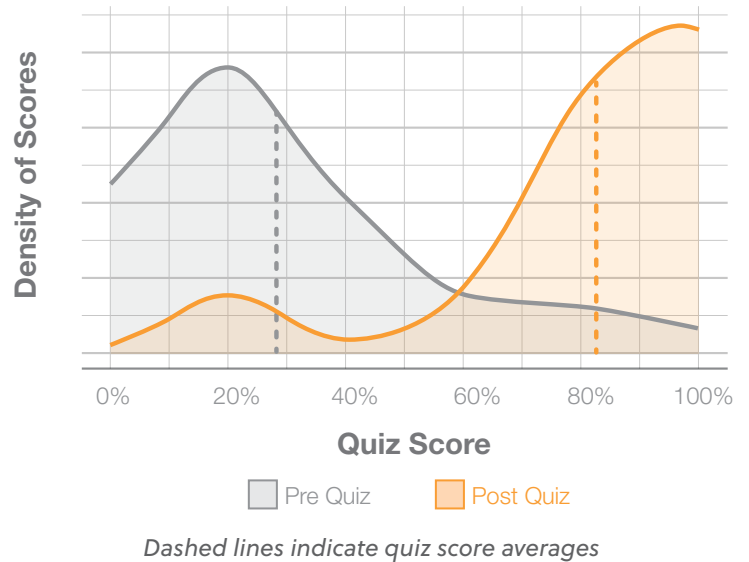
**Caucasian:** 62%  
**Hispanic:** 30%  
**Native American:** 2%  
**Asian:** 2%  
**Other:** 2%  
**FRL:** 43%  
**ELL:** 20%



### ST Math Implementation

**Grades using ST Math:** K-5  
**Type of ST Math instruction:**  
Computer Lab, Classroom

## 5th Grade - Fraction Division Quiz Score Distribution



# 21% Average Gain on Post Quiz across all content areas

## Motivating Students to Become Confident Problem Solvers

Educators at Jacks Valley faithfully implement ST Math, and are seeing results. "Teachers ensure students have two ST Math sessions per week, even on weeks with missing days like holidays or parent conferences," says Gilmartin, emphasizing that consistency is helping her students achieve.

Most notably, she mentions that Jacks Valley students are no longer afraid of standardized tests. Students bravely tackle math problems they've never seen before, and even those students who were once labeled as low performers excel in assessments at the end of the year. "Using ST Math is helping our students develop into critical thinkers. They're problem solving on a deeper level and they're excited about it."

Excitement for math is now an everyday occurrence in Jacks Valley classrooms. An ESL teacher, Andrew Fromdahl, has seen intrinsic motivation become a driving factor in his students' achievement: the rush of overcoming a challenging problem drives students to take on the next puzzle with even more enthusiasm. In his classroom, kids monitor their own ST Math progress and check in with each other to see where they're at. Even those who are a step behind work twice as hard to catch up: two of Fromdahl's ESL students come to homework club before school starts to get on "Jiji Math and keep up" with the rest of the class.