

## **John Murdy Elementary Model Programs and Practices**

### **School Information**

CDS (County District School) Code: 30665226028526

County: Orange

District (Local Educational Agency): Garden Grove Unified

School: John Murdy Elementary

### **Demographics**

Enrollment: 468 students

Location Description: Urban

Title I Funded: Yes

Type of Program: School-wide

School Calendar: Traditional

Charter: No

### **Overview**

John A. Murdy Elementary School, nestled in the heart of Little Saigon, is one of 44 elementary schools in the Garden Grove Unified School District (GGUSD). Murdy is a Title I School that serves 468 students from the cities of Garden Grove and Westminster in grades Kindergarten through 6. About  $\frac{3}{4}$  of students are Asian (predominantly Vietnamese), 14% Hispanic, 2.4% White, 1% Black, and 1% Pacific Islander. The balance of the students (about 8%) report two or more races or unknown ethnicity. About 50% are English Learners and more than  $\frac{3}{4}$  of students receive free or reduced-price lunch.

Murdy offers a variety of programs and services for special populations. These include a new Vietnamese Dual Language Program, GATE (Gifted and Talented Education) cluster classes in grades 1–6, and a Special Education Program. We also offer a myriad of after school enrichment and intervention programs. These include book clubs, art

instruction taught by a credentialed art teacher, technology instruction, and academic supports.

With the knowledge that student success does not rely solely on teachers, Murdy has built a strong partnership with the community. Monthly Parent Teacher Association (PTA) meetings, and quarterly School Site Council (SSC) and English Language Advisory Committee (ELAC) meetings bring parents into the decision-making process. Murdy hosts Family Education Nights 3–4 times a year, focusing on a range of topics from digital citizenship to growth mindset, in an endeavor to inform families about current practices and offer resources.

Realizing the elementary years are formative, but temporary, each teacher and staff member at Murdy understands the importance of their role in preparing students for future success. All our teachers are trained in, and utilize, a variety of academic supports and GATE strategies, such as the Depth and Complexity Framework, that transcend state-adopted curricula.

Fueled by the imperative to prepare our students for life in an increasingly technology dependent world, a school wide emphasis on integrating technology is evident in every classroom. Beginning in Transitional Kindergarten, iPads and Chromebooks are used for assessments, publication, presentations, collaborative learning, and research. Students participate in after school enrichment classes in robotics and computer coding to supplement student learning. In their relentless effort to be progressive, the 20 teachers at Murdy have logged countless hours of professional development in pursuit of best practices to meet the needs of their students and challenge them to think and achieve beyond expectations. With this level of support, Murdy scholars will not only be prepared, but will be leaders in the 21st Century.

## **Model Program and Practices**

Name of Model Program/Practice: Technology for the 21st Century

Length of Model Program/Practice: 2–4 years

Target Area(s): Closing the Achievement Gap, Professional Development, Science, Technology, Engineering, and Mathematics, Use of Technology

Target Population(s): Asian, Black or African American, Hispanic, White, Socioeconomically Disadvantaged, English Learners, Students with Disabilities

Strategies Used: Parent Engagement, Social/Emotional/Behavioral Support, Professional Development, Implementation of Academic Standards Basics (Teachers, Instructional Materials, Facilities)

## Description

Murdy's "Technology for the 21st Century" program is a comprehensive model in which students from Transitional Kindergarten to sixth grade use technological tools to publish student work, present knowledge creatively, and collaborate with classmates. Murdy teachers and staff realize that for students to be successful in this digital age, they must be just as proficient with technology as with reading, writing, and math.

With an abundance of technological tools and a highly trained staff, the goal at Murdy is to build a community of problem solvers ready to take on new challenges. Students are expected to work collaboratively on group projects with the use of technology. They are taught to discuss and solve problems respectfully and with equanimity; take leadership roles where and when necessary; and persevere when faced with setbacks. Our staff realizes that they are not only teaching content and digital literacy, but cultivating a growth mindset that will last a lifetime.

In a school where the majority of students are second language learners, extra-curricular activities help to acclimate students who have difficulty in other content areas. Building and programming robots, and using cameras and microphones, are activities in which students can be successful without having to read or write in their non-native language. In the lower grades, the novelty of robots, green screens, and audio visual equipment sparks interest in non-readers to accelerate learning and ignites students to talk, share, and help one another.

Access to technology gains buy-in from reluctant and disengaged learners. Students who are otherwise passive become motivated risk takers and are invested in their learning. Whether it's creating a broadcast using a green screen or filming an iMovie, the research, planning, and execution of "work" becomes exciting and worthwhile.

Collaboration is an integral part of our Model Program. Students work within grade levels on projects such as green screens, video production, and infographics, as well as across grade levels where older students mentor their younger peers in use of Dash and Dot robots and access to Google Suite (G Suite) accounts. Teachers also collaborate both vertically and horizontally to share skills and ideas.

Our program is inclusive and family oriented. Many parents and siblings have attended parent education events such as "Parenting in a Digital World", which focuses on cyber safety. Parents have also served as coaches and avid spectators in the Lego Mindstorms EV3 robot competition. Further, during Open House, students teach parents about the technologies they have used throughout the year.

Our Model Program helps prepare students for life in a digital world. Exposure to a broad range of technologies and fundamental knowledge in coding primes them for success. Armed with the skills they have learned throughout their elementary school career, Murdy students are bound to succeed at the next level and beyond.

## Implementation and Monitoring

Murdy's commitment to technology implementation is evident in the acquisition of a variety of digital tools over a short time. In 2015, only four classes had a 1:1 device ratio. By 2017, all classes in grades 3–6 had a 1:1 Chromebook ratio and in TK–2, all classes had at least one iPad for every two students. Murdy has a designated STEM room with iMacs, color printers, green screens, Dash and Dot robot sets, iPad carts, a 3D printer and Lego Mindstorms EV3 robots.

Murdy teachers are passionate about closing the opportunity gap for their students, and attended countless hours of technology training during and after school hours, and even on weekends. Most were offered through the district or at the school site, but some teachers even attended trainings at CTA's Good Teaching Conference and First Lego League to learn best practices and creative uses for technology.

In a typical walk through Murdy, one can see primary students accessing core curriculum through iPads and publishing writing on Seesaw, an interactive portfolio. They also use Chatterpix (interactive picture creator), PicCollage (photo collage maker), and TouchCast Studio (green screen app) to process, present, and share learning. In addition, upper grade students use Chromebooks for research and utilize G Suite, Adobe Spark, and infographic websites such as Piktochart and Canva to publish and present work. Many classes use apps such as Flipgrid and Quizzizz for formative assessments. In an effort to involve parents, teachers use Google Classroom and ClassDojo to inform them about assignments and tests, as well as keep them updated on behavior and school events.

For the second year, every Murdy student participated in Code.org's Hour of Code. From simple drag and drop techniques to programming robots and creating games, Murdy can proudly boast that all students have experience with this 21st Century skill. In response to student interest, we provided an after-school coding club for younger students and a robotics club for older students using Lego Mindstorms EV3 robots, where they designed, built, and programmed robots to perform tasks around the theme of Hydrodynamics. We formed two Varsity teams and one Junior Varsity team with both Varsity Teams attending a First Lego League Challenge where they competed against 40 other schools.

In order to organize and offer these resources and in an effort to create a cohesive and continuous learning spiral, monthly meetings are held to open discussion and collaborate across grade levels to study overall practices. Staff examine and assess school-wide needs, create goals, set a course of action, and celebrate successes. The examination continues in weekly grade level collaborations where teachers discuss their role in supporting the greater goal of student achievement. Discussions are shared with the administrator, and as a team, we monitor the overall effectiveness and continuously re-evaluate current practices and determine next steps.

## Results and Outcomes

GGUSD provides a framework which incorporates technology as a support for student success. Implementation of the Model Program at Murdy involves a comprehensive approach where technology supports the development of critical and creative thinking skills. Our model demonstrates how 100% participation by staff in integrating technology across content for academic and personal skills development can boost student achievement.

Quantitative data indicates our Model Program has improved student performance. State and district assessments show the percentage of Murdy students meeting or exceeding standards in English Language Arts (ELA) and Math exceed average district scores and are trending upward. Over the last 3 years, the percentage of our students meeting and exceeding standards in ELA has grown 12 points schoolwide to 68%. A similar trend can be seen in Math, with the percentage up 17 points to 70%.

We believe our Technology for the 21st Century Model Program is closing the achievement and opportunity gaps among our most vulnerable subgroups. For example, our English Learners have maintained a High Level of Achievement in Math and increased to a High Level of Achievement in ELA, with scores in both areas 29 points above Level 3 on state tests. Students with Disabilities narrowed the gap 29 points in ELA, bringing them within 6 points of Level 3, and closed the gap in Math, with year-over-year scores up 15 points. Socioeconomically Disadvantaged student scores increased nearly 15 points in ELA and 3 points in Math compared to the prior year, placing them approximately 30 points above Level 3 in both areas.

We also collect qualitative data to assess student achievement and program outcomes. These include student artifacts, and teacher and administrator observations. Our findings indicate that since implementation of our Model Program, students exhibit greater engagement and motivation, increased confidence and academic risk-taking, and improved collaborative and presentation skills. Students now take greater pride in what they produce, with many having adopted a new tendency to look at their work with a critical eye and make adjustments, and previously disengaged students, willing to write in order to produce work on the green screen.

These conclusions are substantiated through annual district survey data which show positive student attitudes towards learning. Our Model Program has resulted in both teacher and student leadership opportunities. For the last two years, one of our teachers and a team of 5th grade students presented at the CTA conference on Coding and 3D printing, and those same students have participated in the Orange County Department of Education STEM Student Showcase. We consider implementation of our Model Program an iterative process in which we continuously reflect on data and use results to guide improvements. This informs allocation of funds and resources, professional development, and enrichment program offerings.