

## **E. Hale Curran Elementary Model Programs and Practices**

### **School Information**

CDS (County District School) Code: 33752006107858

County: Riverside

District (Local Educational Agency): Murrieta Valley Unified

School: E. Hale Curran Elementary

### **Demographics**

Enrollment: 628 students

Location Description: Suburban

Title I Funded: Yes

Type of Program: Targeted Assistance

School Calendar: Modified

Charter: No

### **Overview**

E. Hale Curran Elementary School (EHC) is located in the suburban community of Murrieta, California within Riverside County. In 2014, EHC became a STEM focus school, supporting Murrieta Valley Unified School District's concept of school choice. STEM - science, technology, engineering and math education- is integrated into grade level California Common Core standards, including the Next Generation Science Standards, through district provided curriculum and teacher developed Understanding by Design (UbD) units of study. We are committed to creating an environment where children are curious and excited about learning. Through our STEM focus we are working on fostering 21st century learning skills. We believe that students must develop creativity, curiosity, collaboration, communication and critical thinking skills in order to be college and career ready. Our goal of every student achieving at high levels drives our decision-making and instructional planning. We believe that all members of the school community play an integral role in the education and well-being of each student and work jointly to ensure that all children become lifelong learners. EHC promotes a

well-rounded education by providing performing arts opportunities through 4th grade strings program, 5th grade band, 3rd–5th grade choir and visiting artists through Horizon’s Unlimited.

EHC is a targeted Title I school serving students in Preschool through 5th grade with a population of 628 students. We strive to provide an environment that embraces and respects our school’s diverse population. In 2016–17 our student groups were 44% Socially Economically Disadvantage (SED); 12% English Language Learners (EL); 16% Students with Disabilities (SWD); 47% Hispanic; 9% Two or More Races and 5% Black or African American.

Our strong commitment to the belief that every student must experience success in their learning, drives our focus on high expectations and meeting the needs of all students. Weekly data meetings and district-allocated Professional Learning Communities (PLC) meetings allow all staff to work collaboratively to analyze student data, develop goals, and plan both intervention and acceleration for students. Multiple formal, informal, standardized and non-standardized assessments inform our data-based decision making. Growth Mindset, as well as Positive Behavior Interventions and Supports (PBIS) lays the foundation for our work with students.

EHC was recognized as a California Distinguished School in 1995, 2000 and 2006. Since our STEM implementation, EHC has been recognized as a 2016 California Gold Ribbon School for embracing rigorous academic standards, providing excellence and creativity in teaching, and for creating a positive school climate. In the same year, EHC was recognized as a 2016 Title I Academic Achievement Award School for our work with Title I students and as a 2016 Honor Roll School for raising student achievement and closing achievement gaps.

## **Model Program and Practices**

Name of Model Program/Practice: STEM Instructional Practices

Length of Model Program/Practice: 2–4 years

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

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

Strategies Used: Parent Engagement, Data-Driven Decision Making, Professional Development

## Description

EHC's model program, STEM instructional practices, has three key areas-Planning, Implementation, and Reflection. Planning begins with weekly STEM Collaboration. Grade level teams use this time to create integrated units using a UbD template and 5E model (Engage, Explore, Explain, Elaborate, Evaluate). In collaboration with our TOSA, units allow for unique learning experiences that assist students in making connections across subject areas and gaining an understanding of topics rooted in real world problems. Implementation of these units has raised student engagement as students are put in control of their learning using a rigorous format of inquiry. Reflection on our instructional practices through weekly data meetings and STEM collaboration is paramount in guiding decisions that will lead to our next steps.

The decision to implement a STEM focus school at EHC began with a vision at the district level to address student achievement as well as declining school enrollment. A shift to a 21st century learning model through STEM, was viewed as a way to improve student learning and close the achievement gap. Essential resources include a TOSA to support STEM PD and collaboration, Aides to release teachers to attend STEM collaboration and data meetings, STEM LCAP funds to purchase PD, materials and resources and a district bond used to update and purchase technology. Understanding STEM as praxis, rather than a program, is the objective of our ongoing PD opportunities. A shift to a deep understanding of rigorous and relevant 21st century learning skills reflects an ongoing commitment to making sure STEM instructional practices are being integrated. Through STEM instructional practices, we expect to increase school wide achievement, school enrollment, student engagement, positive social/emotional relationships as well as attitudes towards learning. Teaming with PTA, we expect to see increased partnerships with parents and the community through involvement in STEM based activities.

STEM instructional practices increase student engagement through hands-on experiential learning, keeping students actively involved. Students' academic achievement is reflected in our multiple measures and CAASPP data. Our model provides equitable access to content for our unique student population. Students can access learning without a language barrier and are provided with alternate modalities to learning rather than passive acquisition of knowledge. Working collaboratively, students feel part of a group which is vital to their attitude about school. Through our district LCAP, we provide equity for all students through STEM.

By supporting students through STEM instructional practices, PBIS and growth mindset, we are building a culture that supports students' social-emotional needs. As they build communication and collaboration skills, students take an active and increased interest in their learning contributing to a decrease in chronic absenteeism as well as suspension.

## **Implementation and Monitoring**

Parents are an integral part of our team and play an important role in our goal of student achievement. We engage families in STEM based activities that relate to our instructional practices. Throughout the year we have family STEM nights where parents work alongside students to tackle challenges that require cooperation and perseverance. Toward the end of the year, students showcase their learning at our STEM Expo. This is open to our families and community.

We use a variety of methods to communicate our STEM goals and successes. We communicate through a STEM Facebook page, weekly emails and use Twitter to highlight our students and inform parents about activities and events. Our school website features a STEM page which shows our implementation plans, presentations, and STEM resources, including our UbD units. We have weekly student and staff bulletins that offer STEM tips to staff. Our Student Technology Leaders produce a weekly newscast to inform students, parents and the community. Our monthly newsletter includes a STEM section with information about STEM practices.

Methods used to monitor and assess the effectiveness of our STEM practices for our parents and community include direct feedback from families through Coffee with the Principal and Coffee with EL parents. Sign-up sheets are used to show attendance from our STEM information and family nights. We analyze LCAP survey results regarding our STEM practices and hold monthly Site Council meetings consisting of parents and staff.

Our professional learning activities provide capacity building opportunities for all staff. Staff meetings include some form of PD related to our STEM practices. Several grade level teams have attended various NGSS and STEM Symposiums. Our TOSA attends STEM related trainings and workshops to provide instructional leadership and coaching at our site. Our monthly Leadership team (non-instructional and instructional staff) includes instructional leadership PD opportunities. PLCs are encouraged to inform STEM practices through the viewing of webinars and/or TOSA collaboration. Lesson studies with a focus on the cross curricular integration were also held. Teachers are encouraged to visit other classrooms to collaborate about STEM practices.

Many forums are used to evaluate our STEM instructional practices such as weekly data meetings, STEM collaboration, and PLCs. Program data such as iReady, iRead, Fast Math, Imagine Learning (EL), and Read Live is reviewed and analyzed as well as CAASPP and interim assessment data at these meetings. Principal and teacher walkthroughs, with the use of the rigor and relevance framework, are additional methods used to help monitor progress.

## **Results and Outcomes**

Multiple measures are used to evaluate the effectiveness of our STEM instructional practices. We analyze our data through our various forums to inform our planning and implementation of instruction. Ongoing reflection guides our next steps. Positive results from both quantitative and qualitative data are collected through state assessments,

district universal screening tools, teacher developed assessments, and daily classroom activities.

According to our 2016–17 CAASPP results all students increased significantly in math achievement with a change of +19.2 points. Our LCAP student groups also made a marked increase in achievement in mathematics. Our EL students increased +13.7 points; SES students increased significantly with +17 points; SWD increased significantly with +54.7 points; African American students increased +13.2 points; and Hispanic students increased significantly with +27.6 points. In ELA, all students increased in achievement with +9.9 points change. Our EL students maintained; SES students increased with +6.5 points; SWD increased significantly with +35.7 points; African American students increased +6.4 points; and Hispanic students increased significantly with +16.1 points. Our school's "Conditions and Climate State Indicators" for suspensions declined from 1.1% in 2016 to 0.8% in 2017. Our chronic absenteeism has also declined from 10.5% in 2016 to 7.3% in 2017.

EHC also uses district universal screening tools to quantitatively measure student growth and proficiency four times a year. An analysis of this data indicates significant growth over time in both math and reading proficiency for all students as well as our LCAP student groups. The end-of-year universal screening data documented growth in math proficiency for grades 3–5 from 11% proficient in 2015 to 49% proficient in 2017. The screening tools also reported our end-of-year reading growth from 39% proficient in 2015 to 68% proficient in 2017.

Qualitative measures such as ongoing administrative walk-throughs, TOSA co-teaching experiences, and daily classroom activities, demonstrate evidence of the effectiveness of STEM instructional practices in each and every classroom. Students are engaged in rigorous and relevant real world learning incorporating evaluation, synthesis, and analysis.

Prior to implementing our STEM focus, Curran had a continuous yearly decline in student enrollment. In 2014–15, the beginning of our STEM implementation, student enrollment K–5 was 513. Our current enrollment is 582. We attribute this growth to the interest in our STEM focus. Our LCAP survey data, which elicits feedback from our stakeholder indicates a high level of satisfaction with our STEM focus. Comments from our parent groups also consistently indicate high levels of satisfaction with our STEM Instructional Practices.

We continually reflect upon our results and explore ways to close the achievement gap through rigorous and relevant STEM instructional practices.