

Teach Elementary School Model Programs and Practices

School Information

CDS (County District School) Code: 40688096043301

County: San Luis Obispo

District (Local Educational Agency): San Luis Coastal Unified

School: Teach Elementary School

Demographics

Enrollment: 154 students

Location Description: Rural

Title I Funded: No

School Calendar: Traditional

Charter: No

Overview

Teach Elementary School (TES) is located on the Central Coast in the city of San Luis Obispo. TES offers challenging academics in an engaging learning environment for students in grades four through six. Our mission is to provide an alternative choice for parents and students in the San Luis Coastal Unified School District. TES is designed for students whose needs include a rigorous curriculum, the opportunity for challenge and enrichment, an outlet for creativity and individuality, and an atmosphere that promotes leadership, responsibility, collaboration, and independence. Our vision is to empower our students to become innovators, explorers, lifelong learners, and contributors to a diverse global community.

As a California Distinguished School in 2014, TES was poised to welcome the increase in rigor and expectations of the California State Standards and the Next Generation Science Standards. TES teachers would endeavor over the next several years to develop instructional techniques, implement newly adopted curriculum, and continue to expand the TES program to provide relevant, engaging learning experiences for our highly motivated students.

With an emphasis on Science, Technology, Engineering, Arts and Math (STEAM) education, TES develops 21st Century Learners who are world citizens and have "4C" skills: Critical Thinking, Communication, Collaboration, and Creativity. Teachers utilize a variety of instructional strategies to provide a deeper, broader exploration of content, meaningful dives into real-world problem-solving, and opportunities for each student to enhance strengths, develop areas for growth, and fail forward in a supportive learning environment.

The proximity of our campus to California Polytechnic State University (Cal Poly) offers a variety of mutually beneficial learning opportunities. We embrace their "Learn By Doing" philosophy. By partnering with professors, students, and organizations, our students have access to extraordinary learning opportunities, establishing a clear vision of the pathway to college early in their K–12 education. Other partnerships throughout the community enhance learning for TES students as well. Our students learn about their connections to the community through service learning. Parents are an integral part of our school, providing considerable volunteer and financial support. Through our partnerships, we are able to bring experts in the field into classrooms, provide extraordinary learning experiences for students, and connect our students to the local and global community.

We continue to strive for excellence and challenge our own thinking about our program, changing and growing along the way. We consider what students need to be critical thinkers and problem solvers today, and everyday into the future. Our program is a dynamic, growing entity because of the creative influence and shared leadership of our students, teachers, parents, and community.

Model Program and Practices

Name of Model Program/Practice: Innovation and Exploration Initiative

Length of Model Program/Practice: 5–8 years

Target Area(s): Parent, Family, and Community Involvement, Science, Technology, Engineering, and Mathematics

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

Strategies Used: Parent Engagement, Professional Development, Implementation of Academic Standards Basics (Teachers, Instructional Materials, Facilities)

Description

Students who attend the accelerated learning program at Teach Elementary seek a rigorous curriculum with additional academic challenge and engagement. Our school's

model program is the Innovation and Exploration Initiative (IEI), a highly engaging way to develop critical thinking, creativity, communication and collaboration skills.

The IEI allows students to identify real world problems, examine existing product solutions, and apply reading, writing, research, and critical thinking skills to design and innovate solutions, following the engineering design process. This practice embodies our principles of student-centered classrooms and project-based learning to increase student engagement.

Each class builds a different large scale project. Students pitch and vote on the problem to solve and possible solutions. Each class has a budget of \$200 for construction materials. Student teams must also market projects with how-to-manuals, websites, brochures, commercials, slideshows, and/or slogans. Class teams break into research, construction, technology, and marketing teams, much like a business.

Collaborative teams are often assisted by Cal Poly engineering students and community experts in the field. Students preview projects to parents at Open House on the eve of the Annual IEI Showcase. At the IEI Showcase, students present their solutions to a panel of dignitaries including a Cal Poly professor, the District Superintendent, and a School Board Member. Panelists award each class project as Most Innovative, Futuristic or Revolutionary. Past IEI projects include a shark detection system, a backyard desalination device, a human foosball game, the repurposing of the Morro Bay Power Plant, a playground for children with disabilities, and an emergency preparedness kit.

The IEI embodies student-centered classrooms and project-based learning and increases student engagement across all populations. Many classroom behaviors are addressed by its hands-on, active learning environment. Social-emotional learning is supported by its collaborative, community-building nature. Our Achievement Gap is minimal; our chronic absenteeism and suspension rates are below district levels. TES students are excited to come to school to create solutions to real-world problems. Ongoing professional development, educational conferences and exemplar site visits expand our IEI across curricular areas. IEI success has encouraged teachers to innovate all project work.

The IEI integrates English Language Arts with STEAM and develops students' critical thinking, communication, collaboration, and creativity skills. Aligned with our LCAP Focus Area #4: Technology and Innovation, the IEI has fundamentally changed the way we think about teaching, learning, and student engagement. Vision, effort and courage launched the program; professional development and parent and community partnerships have sustained it. Student achievement and enthusiasm keep it growing.

Implementation and Monitoring

Our proximity to Cal Poly has allowed many collaborations with college faculty and students to develop and strengthen Teach engineering programs. The IEI was developed in collaboration with a parent who is a Cal Poly Biomedical Engineering

professor. Parents and Cal Poly engineering students volunteer to assist the class in building IEI projects by bringing materials, guidance, and expertise to campus. All parents preview the projects at Open House and students present solutions at a school-wide showcase to a panel of dignitaries, including a Cal Poly professor, the District Superintendent, and a District School Board member. Teach Boosters budget \$200 for each class as part of their annual fundraising efforts. IEI has inspired additional parent, community, and Cal Poly collaborations for STEAM education.

The importance of STEAM education has been widely accepted across the United States. Parents choose our program because of the additional opportunities in engineering and PBL highlighted on our website, at Back-to-School night, during Open House for current and prospective families, and at Family Engineering Night.

Parents share in the vision and leadership of TES through Booster Club and School Site Council, providing considerable volunteer time, financial support, and feedback. All members of the community bring ideas to the table and work together (over 3,450 volunteer hours per year) to create an incredible learning environment. Our annual parent satisfaction survey provides feedback about our school's program. The growing number of partnerships indicate the effectiveness of our community engagement.

Implementing IEI required teachers to rethink classroom learning and step out of their comfort zone to learn, and sometimes fail, alongside their students. In addition to embracing this "Learn By Doing" mindset, teachers have also engaged in specific professional learning opportunities, such as Google Apps for Education, Techie Boot camps, LEGO Mindstorm Robotics, Substitution Augmentation Modification Redefinition (SAMR) model for educational technology, Family Engineering, and Google Screencastify. Teachers and the principal attended the Deeper Learning Conference and the Buck Institute PBL Training, and have visited other exemplary schools in the state to gain insight and ideas to improve our program. As a model school in the use of technology, TES designed and hosted Tech Tools and Robotics workshops for other district teachers.

Results and Outcomes

Our model practice, IEI, has been implemented to provide depth and rigor in academics and develop the 4C skills. CAASPP results provide academic achievement data; our parent satisfaction survey and BrightBytes student survey provide engagement and 4Cs information.

The IEI is integral in our school's SPSA focus to expand technology and promote innovation to prepare students for college and career. Our Spring 2017 parent satisfaction survey indicated our parents agreed that our school addresses the following topics: meets the academic needs of the students (90%), expects quality work (95%), has an excellent learning environment (88%), performs well academically (96%), and succeeds at preparing children for future work (86%).

IEI requires students to think critically about problems, perform research, create solutions, communicate ideas, create marketing materials and collaborate with a team, engaging students in meaningful 4Cs work. The annual BrightBytes Learning and Technology student survey results provides insight into student use of technology and the 4Cs in classroom learning. Our 2017 results indicate our school is proficient overall in student classroom use of the 4Cs, as compared to a district-wide score of emerging. Our school goal is to move from proficient to advanced in the coming year by providing additional learning opportunities.

BrightBytes data related to critical thinking skills showed that 99% of students at TES conduct research online at least monthly (compared to 88% in the district overall), and 70% of students are asked to collect and analyze data at least monthly (52% district). For creativity, data showed that 99% of TES students develop or present multimedia presentations at least monthly (75% district). For communication, data showed that 87% of students receive feedback from others in the classroom at least monthly (79% district). Data also showed that 97% of our students are asked to collaborate at least monthly (63% district).

PBL experiences such as IEI have added to a rigorous, engaging learning environment for TES students. CAASPP results for 2017 indicate TES students perform at the highest levels in ELA and Math. Results indicate that 96% of TES students met or exceeded ELA standards (63% district); and 94% of TES students met or exceeded math standards (66% district). Our achievement gap for Socioeconomically Disadvantaged students is minimal, with 88% meeting or exceeding ELA standards (42% district), and 91% meeting or exceeding math standards (42% district). We continue to set the goal of all students meeting or exceeding standards in ELA and math.

An analysis of our Parent Survey, BrightBytes, and CAASPP results indicate that we are on the right path for providing depth and rigor in academics and developing 4C skills. Through additional integrated learning experiences such as IEI, we continue to look for opportunities to expand innovative programs for all of our students.