

Jack L. Weaver Elementary Model Programs and Practices

School Information

CDS (County District School) Code: 30739246029052

County: Orange

District (Local Educational Agency): Los Alamitos Unified

School: Jack L. Weaver Elementary

Demographics

Enrollment: 709 students

Location Description: Suburban

Title I Funded: No

School Calendar: Modified

Charter: No

Overview

Jack L. Weaver's reputation has made it a highly sought after school of choice both within the Los Alamitos Unified School District and from neighboring districts.

Pride evolves from Weaver's outstanding traditions and accomplishments. Weaver is a model school in Orange County and has received numerous accolades since its re-opening in the 1996–97 school year. Continuously ranked among the top schools in Orange County, our staff is highly talented and has embraced the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS). Weaver previously received the National Blue Ribbon School Award in 2004. Since then, the school has been a three time recipient of the California Distinguished School Award, a Golden Bell Award for our signature practice in Cognitively Guided Instruction (CGI), and in 2016 the California Gold Ribbon School Award. Additionally, Weaver was the only school in Orange County to receive a 2017 National Blue Ribbon School award.

Board priority goals support student success in academic achievement, arts education, school activities and athletics. The district's motto of "Igniting Unlimited Possibilities for

Students" exemplifies its commitment to ensuring that students leave our district with unlimited post-secondary opportunities.

The heart of the school's mission centers on rigorous curriculum, high expectations, skillful staff members, character development, social responsibility, and family/community partnerships. Weaver is also a hub for a specialized program for pre-school/Kinder children with autism and a non-categorical special needs program for students with various disabilities.

All students have the opportunity to extend their learning in after school classes through our partnership with the Los Alamitos Education Foundation and the Youth Center of Los Alamitos. Through partnership with these organizations, students are able to participate in after school enrichment classes in Foreign Language, Martial Arts, Art, Instrumental Music, and Fitness.

Utilizing the modified year-round calendar, school opens at the beginning of August and ends the second week of June. Students have a six week summer recess and breaks are spread evenly throughout the year. This continual cycle of learning facilitates academic success for all students. Weaver operates with a growth mindset and is firmly committed to developing the learning potentials of all students. "Best First Instruction" is research based and is delivered consistently across all grade levels. Purposeful instruction coupled with intervention that serves as a second dose of targeted instruction, supports all students.

Weaver School believes in, and focuses on, building a collaborative team with staff, students, parents, and community members. As dedicated child advocates, all Weaver stakeholders take pride in Weaver's exemplary reputation and help fulfill our school motto: "A Great Place to Learn."

Model Program and Practices

Name of Model Program/Practice: Cognitively Guided Instruction (CGI)

Length of Model Program/Practice: 8+ years

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

Target Population(s): Asian, Hispanic, White, English Learners, Students with Disabilities

Strategies Used: Small Learning Communities, Data-Driven Decision Making, Professional Development

Description

CGI is an educational philosophy built on over thirty years of research (Fennema and Carpenter, 1996). It focuses on problem solving through a variety of 14 problem types and infinite solution strategies. CGI also helps teachers to focus on student learning in order to make instructional decisions.

CGI was first implemented at Weaver over 17 years ago. The program fulfilled a need to close the achievement gap among various learning groups and to improve the overall math achievement of all students on benchmark exams and standardized testing.

With a more constructivist philosophical lens, CGI supports the development of student conceptual understanding of mathematics through problem solving. For each CGI lesson, classroom teachers strategically select a problem type to meet the needs of every student and differentiation of instruction is allowed through “number choices”. The problem is presented in whole group instruction and important information/data within the problem is discussed. Children learn to analyze, identify, and extrapolate the important data in the problem that will help them solve the problem. We refer to this as “unpacking the problem”. Students then work independently to solve the problem using any strategy that works for them. Before solving, students in the primary grades make decisions about their choice of manipulatives, deciding when and how to use hundreds boards, base ten blocks, snap cubes and number lines and develop personal strategies such as direct modeling, counting on and derived facts to solve mathematical story problems. In the upper grades, students have built upon their previous CGI math experiences to solve complex multi-step word problems with abstract thinking and reasoning.

During the “share out,” teachers select students who can share strategies that will promote extended thinking. This may include students with errors in thinking and common misconceptions. This practice promotes metacognition of mathematical reasoning, peer coaching and collaboration, all high impact strategies that lead to increased student achievement (Hattie, 2010). This format supports struggling learners in seeing other perspectives for understanding and challenges our advanced students to build on new ideas. The rich use of math vocabulary provides a high level of conversation for all learners. CGI contributes to student achievement by strengthening their ability to transfer understanding of mathematics into real life, complex, and higher level problems (Franke et al, 2009). Students also learn to view errors as a natural part of the learning process.

Beyond outstanding achievement, CGI created a way of approaching teaching and learning at Weaver. Since then, this type of inquiry-based, problem-solving approach at Weaver has become imbedded as an instructional philosophy and approach in all content areas. This is truly a distinguished part of the culture at Weaver.

Implementation and Monitoring

From the start, the enthusiasm of the Weaver staff to learn the CGI philosophy was both overwhelming and contagious. The first training was held during a winter recess where ten teachers participated in a five-day intensive workshop. Teachers studied the fourteen problem types and explored, practiced this new learning. Afterwards, teachers returned to their classrooms with a new focus for mathematical problem solving. To further ensure successful implementation, one of our trainers provided peer coaching one-day each month. Parents of students who had CGI trained teachers began to request that their children be placed in CGI classrooms for the following year. It wasn't long before every teacher on the Weaver staff had completed the training.

As part of the training program, each teacher received a minimum of two years of peer coaching to provide feedback and encourage professional dialogue. In addition, professional learning meetings were held monthly to discuss CGI strategies, new ideas and "bumps in the road". Through this process, Weaver teachers learned to make decisions about student learning in mathematics (scaffolding, differentiation, and instructional planning), recognize how children develop mathematically, and help students to make sense of mathematics, promote thinking, reasoning, analyzing, and mathematical communication. Additionally, teachers changed expectations as they learned to assess children's knowledge, consider students' learning as instructional decisions are made, and create an environment where children can construct their own knowledge and facilitate learning through strategic questioning.

CGI has since expanded into a district signature instructional practice. Staff development is available to support increased teacher capacity. All new district teachers complete a five- year training plan in CGI. Additionally, all teachers receive coaching with a TOSA who is a CGI expert. District teachers also have the opportunity to observe CGI demo lessons and participate in ongoing trainings. Site administrators are also encouraged to attend CGI trainings, participate in coaching, and observe demos during staff development days. Weaver teachers continue to use monthly PLC meetings to monitor the effectiveness of strategies, develop new strategies, and align their CGI practices to the CCSS. In addition, teachers have collaborative discussions about the purposeful use of data sets to differentiate instruction for students. Students self-select or are prompted to choose appropriate difficulty.

CGI practices and strategies are shared with parents and the community through Parent Education Nights and multiple avenues of communication.

Results and Outcomes

Weaver's use of CGI has been tremendously successful for all students leading to state and national recognition of our ability to close the achievement gap for significant subgroups. Recent data shows an increase of 31% in Math in 3rd grade in our Hispanic subgroup alone. This increase leveled the playing field for all sub groups. On the 2017 of CAASPP, all grade levels were 93% or higher in meeting or exceeding grade level

standards in mathematics. These results are the effects of frequent assessment and monitoring of all students.

At the beginning of each year, teachers analyze the CAASPP and District Benchmark data of each child. The site develops an intervention plan for any student who is not proficient on assessments from the previous year. Throughout the year, ongoing analysis yields information on how instruction should change to improve learning. Teachers of students in K–2 administer benchmark exams on students multiple times a year and make instructional plans based on student progress. Intervention plans are monitored and developed as needs arise. Plans are also made for students who are already advanced to ensure that they are continuing to develop at their level. In grades 3–5, students take a mid-year exam (Interim Comprehensive Assessment) which mirrors the SBAC. Data from the ICA, as well as district benchmark data, is gathered to monitor student progress toward the CCSS and adjust instruction and interventions accordingly. A wide range of frequent formative assessments also regularly track student progress. Teachers use anecdotal observation data, quick comprehension checks, pre-tests and post-tests to determine student progress. Students also participate in a variety of projects, presentations, and performance based assessments so that teachers are also able to measure additional skills such as critical and creative thinking, communication and collaboration.

Weaver teachers are profoundly proud of the tremendous impact on and growth of their students as they continually improve their CGI practice. Moreover, Weaver teachers successfully continue to analyze data, allowing our practices to evolve, so that we can continue to help every student to excel. As the data above indicates, we have nearly closed the achievement gap in mathematics, shown improvement in all subgroups and increased the levels of rigor for every student.