

Birney Elementary School Model Programs and Practices

School Information

CDS (County District School) Code: 19753416022032

County: Los Angeles

District (Local Educational Agency): Redondo Beach Unified

School: Birney Elementary School

Demographics

Enrollment: 437 students

Location Description: Suburban

Title I Funded: No

School Calendar: Traditional

Charter: No

Overview

Birney Elementary School, home of the Bobcats, is nestled in the north Redondo Beach community. As one of thirteen schools in the Redondo Beach Unified School District, our staff is proud to provide our students and families with a nurturing learning environment that recognizes and values whole child education wherein children can grow to discover their strengths, dreams, and passions while learning how to use those strengths for the greater community. Our success, above all else, is about forming relationships as a vehicle to ensure the success of all students. Out of these relationships has grown a culture of excellence and high expectations, collaboration, risk-taking and reflection, always keeping our mission of providing a safe, academically rigorous and whole child focused at the center of all we do as a school.

Birney Elementary is a diverse learning environment. We are proud of our diverse student population that truly represents acceptance and inclusion of all students in every aspect of our school environment. Birney Elementary School's current enrollment is 437 students who are comprised of many ethnic subgroups: 45% white, 22% Hispanic, 12% Asian, 19% two or more races, and 2% African American. Within this

diverse learning environment, Birney's students have consistently performed exceptionally on external measures of academic achievement.

Our Birney PTA as well as the Redondo Beach Education Foundation provides our teachers and students with funding for learning materials, educational field trips, assemblies to connect learning, music, and acts of community service. Parents also contribute to the school by serving on our School Site Council, Wellness Council, Alliance for a Healthier Generation, Grades of Green, facilitating Hands-On-Art and Hands-On-Science and nutrition and gardening lessons, as well as dedicating countless hours in the classroom volunteering.

Birney strives to mold the whole child by ensuring standard-based instruction guided by on-going assessment of individual needs, and by establishing high expectations for all students. Our instructional program includes services for gifted, special education and limited English proficient students. We strive to create students who are critical thinkers, life-long learners, and decision makers who are prepared to be successful not only in school, but in their adult lives and a technology-competitive world.

Birney is on a journey to develop teacher capacity within instruction by partnering with UCLA to provide Cognitively Guided Instruction (CGI) coaching to all teachers. This coaching allows teachers to build on student knowledge while fostering an environment where critical thinking and collaboration are encouraged. Birney staff are committed to working with families, community liaisons, service providers, and educational professionals to ensure every child achieves success.

Model Program and Practices

Name of Model Program/Practice: Cognitively Guided Instruction

Length of Model Program/Practice: Less than 2 years

Target Area(s): Closing the Achievement Gap, Education Supports, Parent, Family, and Community Involvement, Professional Development, Science, Technology, Engineering, and Mathematics

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

Strategies Used: Small Learning Communities, Data-Driven Decision Making, Professional Development, Implementation of Academic Standards Basics (Teachers, Instructional Materials, Facilities)

Description

Cognitively Guided Instruction (CGI) is a professional development program focused on: the development of students' mathematical thinking with instruction that influences that

development; teachers' knowledge and beliefs that influence their instructional practices; the way teachers' knowledge, beliefs, and practices are influenced by teacher understanding of students' mathematical thinking. The lesson designs are carefully crafted to align with grade level Common Core State Standards in mathematics and analyzed student work. CGI coaching engages teachers in learning about the development of children's mathematical thinking within particular content domains. Our analysis of students' mathematical thinking is that children intuitively solve real-world story problems by modeling the action and relations described. Teachers further explore how basic concepts of addition, subtraction, multiplication, and division develop in students and how they can construct concepts of place value and multi-digit procedures to further develop their mathematical reasoning.

Birney Elementary believes strongly in the development of building teacher capacity with the support of a coaching model. We have partnered with the University of California, Los Angeles to support teachers within this charge. Birney Teachers have entered into their second year of a coaching model that is built around ensuring student growth and success across campus. This Journey has caused our teachers to think deeply about student work and the steps necessary to ensure differentiated instruction and student growth for all students. Teachers participate in two cycles of direct coaching where teachers are active participants within lesson design and classroom implementation with real-time coaching. Teachers receive sub-release time and spend three half days per cycle working directly with the CGI coach on the Birney campus. Teachers analyze student work and develop next steps to support student thinking. After the lesson is carefully designed with the objective clearly identified, the teachers and CGI coach head to a classroom where the teacher implements the lesson. The coach and colleagues are active participants in the execution of the lesson which includes listening to student collaborations with one another and asking questions to engage student thinking and reasoning. Following the activity, the team gathers to debrief and plan what could be next steps for the students based on the evidence presented within their thinking and work production. Teachers collaborate multiple times per week to discuss student work and use the basis of that thinking to further plan activities that build on student thinking why allowing them the opportunity to grow.

Implementation and Monitoring

Cognitively Guided Instructional Coaching started during the 2016–2017 school year based on the need to understand student thinking within mathematics and a desire to not only learn how students thinking impacts their math journey, but how teachers can plan lessons based on what their students know. Year one of CGI Coaching was dedicated to helping teachers understand the extensive thirty years of research behind Cognitively Guided Instruction and the “why.” Teachers dug deeply in the progressive development of students' mathematical understanding. During year one of CGI coaching teachers participated in two cycles of coaching with each coaching cycle yielding three full days of coaching. The cycle of coaching centered around four teacher moves that were planned and carried out in the classroom with their colleagues and coach as part of the observers 1) Teachers pose a variety of story problems, understanding that problem solving is the focus of instruction 2) Students use many

problem-solving strategies to solve the story problem 3) Students communicate with their teachers and peers how they solved the problems 4) Teachers understand students' problem-solving strategies and use that knowledge to plan instruction.

In the 2017–2018 school year, the coach cycle changed in that teachers participate in two half-day cycles. The CGI coaching focus is about lesson design and implementation with a continued focus on student thinking and planning instruction and next steps according to students level of understanding. Teachers continue to build within their capacity and gain a deeper understanding of the positive and critical role CGI instruction plays within instruction and mastery of the common core state standards in mathematics.

In the 2017–2018 school year, we are piloting a parent engagement component where parents spend the day on campus with their third grade child. The parents and student attend three different classes where three different Cognitively Guided Instruction (CGI) activities will be explained and both the student and parent(s) engage in the activity. This is one way Birney Elementary values parent involvement and engages parents in a school activity to further help their understanding of the CGI instruction taking place in the classroom daily.

Results and Outcomes

Cognitively Guided Instruction is an approach to teaching mathematics where teachers listen to students' mathematical thinking and using that information to build instruction. Teachers learn this skill by working with a seasoned UCLA Mathematics Coach that helps teachers make sense of student thinking and how to build upon that by using it as a basis for instruction. They are led on a journey to become critical thinkers who are well rounded and able to understand real-world story problems while selecting a strategy that works for them to yield not only an answer but a justification. Students are taught that the journey is more important than a final answer. Understanding the steps of solving a word problem is much more powerful than jumping to an answer using an algorithm with no conceptual understanding as to the "why" behind the results.

Birney Elementary is dedicated to providing a rigorous education to all students while understanding the need to develop teacher capacity. Evidence from the CAASPP scores for the 2017 school year indicate the percent of students meeting or exceeding grade level standards in mathematics are well above the state average: 83% in third grade; 80% in fourth grade; and 58% in fifth grade compared to the state averages of: 43% in third grade, 45% in fourth grade; and 46% in fifth grade. As we continue to educate students moving into a world that is rapidly changing and requiring critical thinking skills to be at optimal performance level, we recognize the need to develop teacher capacity. We will continue down the path of meaningful coaching while focusing on student thinking and the planning of lessons linked to that thinking. Student growth at Birney is a direct result of a desire for Birney teachers to learn and grow in their practice. This openness coupled with great coaching continues to put us on a journey of meeting student needs.

“In this changing world, those who understand and can do mathematics will have significantly enhanced opportunities and options for shaping their futures” (National Council of Teachers of Mathematics, 2000, p. 50). It is our deep desire to educate multiple generations of students who are critical thinkers, not just in math but across subject matters. Birney teachers collaborate multiple times per week to analyze student work, share student thinking and plan activities that will further support their students’ level of understanding while supporting growth. Students’ reasoning and justification of answers to their peers and teacher allows them to carry that into a multitude of other activities. Additionally, student collaboration and deep understanding of mathematical concepts allows for rich conversations that not only builds confidence, but also what we call “soft skills.”