

# California Department of Education 2014 California Distinguished Schools Program



## **Elementary School Application: Part A**

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<b>Exemplary Education</b>	Progra	ms ~ [	Optiona	al—addit	ional applic	eation(s) enclosed]
Arts Education Application						
37 68056 6110696						
County-District-School (CDS) Co	ode—14 Di	gits				
San Diego						
County Name			<del></del>			
Del Mar Union School District Name	ict					
School Name (If your school is so	elected for	honors, th	his schoo	ol name wi	ill he engrave	d on the award placue )
		·				a on the award plaque.)
12345 Carmel Park Drive Mailing Address				San Di	ego Zip Code	92130
Waling / laarooo				City and	Zip Code	
(858) 481-6789	3599	9			81-7418	
Area Code and Phone Number	Ext.			Area Co	de and Fax N	umber
edelaney@dmusd.org						
Principal's E-mail Address						
	¥	- ~	<b>s</b> 3	7 4	4	•
I certify that I have reviewed	d the info	rmation	contair	ned in thi	s applicatio	n and, to the best of my
knowledge, it is complete as	nd accura	ite. I furi	ther ce	rtify that:		
The Office for Civil F violations by the sch	Rights doe	es not ha	ave ang t mav a	y outstan	nding finding	gs of civil rights statute
	g lawsuit: e district	s by the as a wh	Depar ole, ha	tment of s violate	Justice aga d one or mo	ainst the district alleging ore of the civil rights
		•			•	·
<ul> <li>The school or district noncompliance under</li> </ul>	t is addre er federal	ssing or or state	rhas ad Iaws a	ddressed Ind regul	l any identii ations	fied areas of
Eileen Mary Delaney				Cole	M	Dec.16, 2013
Principal's Name			-	Principal'	s Signature	Date
Dr. Holly McClurg				Hode	in Mila	Punta 2012
District Superintendent's Name			<del>-</del>	District S	uperintenden	Dec.16, 2013 t's Signature Date

## **School Information**

1.	Current school enrollment: 533					
2.	Which category best describes whe	re your	school is lo	cated?		
	☐ Urban	∏ Ru	ral			
3.	Does your school receive Title I fund	ding?	☐ Yes		<b>⊠</b> No	
	If yes, indicate type of services:		☐ Scho	ol-wide	☐ Targ	eted Assistance
4.	What is your school calendar?	<b>⊠</b> Tra	aditional	☐ Yea	ır-round	Modified
5.	Is your school a charter school?	☐ Ye	s	⊠ No		
6.	Number of full-time and part-time st	aff mem	bers in eac	ch of the	categories	s below:
				<u>Full-tii</u>	ne Staff	Part-time Staff
	Administrators				1	0
	Classroom teachers				24	1
	Counselors				0	0
	Credentialed librarians				0	0
	Nurses				0	1
	Psychologists			_	0	1
	Technology/media specialists or tec	hnicians	;		1	0
	Paraprofessionals				15	0
	Campus resource officers				0	
	Other staff <i>(specify)</i> Administrative Manager, Night Custodians, Speed Physical Therapist, Resource Specia	h Patho	ologists, Ad	daptive F	PE, Occur	pational Therapist
					<u>8</u> .	<u>7</u>
	Total staff				49	10_

#### **Directions to Your School**

If your school is selected as a statewide nominee, the site visit team members will need directions to your school.

San Diego County		
County		
Del Mar Union School District		
District		
Carmel Del Mar School		
School		
12345 Carmel Park Drive	San Diego 92130	
Street Address	City and Zip Code	
Eileen Mary Delaney	(858) 481-6789	3599
Principal	Area Code and Phone Number	Ext.
San Diego International Airport/Lindbergh Field		
Name and Location of the Nearest Airport		
Interstate 5 North		
Major Freeway Access		

Provide detailed travel directions indicating the surface streets that lead to your school. Please do not submit directions or a map generated by an Internet Web site.

Exit airport and follow signs for Interstate 5 North. Travel 10.6 miles. Take the exit toward CA-56E/Local Bypass. Take the CA-56 E exit, Exit 33A. Take the Carmel Creek Road exit, Exit 1. Turn left onto Carmel Creek Road. Turn right onto Carmel Grove Road. Turn left onto Carmel Park Drive. 12345 Carmel Park Drive, Carmel Del Mar School, is on the right. (Be careful ~ many of the street names have the word "Carmel" in them. Don't let them confuse you!)

Carmel Del Mar School

#### **School Overview**

Nestled in the Carmel Valley, Carmel Del Mar (CDM) opened its doors for the first time in 1992. Built with unique architectural features that make CDM look like a castle, this neighborhood school is surrounded by homes, apartments, and condominiums with a series of pathways and parks that truly make it the heart of our community. Most students walk or ride their bikes to school each day, and families often gather in our front courtyard before and after school. The CDM campus is beautiful with trees and sweeping fields. Since we share a play structure and several athletic fields with the City of San Diego, we have large areas for physical and outdoor education.

The dedicated staff at CDM works hand in hand with a dynamic and generous community. Staff members and parents support the leadership of the school as members of the School Site Council. The PTA hosts a variety of events that our entire community enjoys. Our Dad's Club sponsors several events, to include the Brown Bag Lunch series, which brings more than 150 parents to CDM each month for lunch. Due to the efforts of our Education Foundation, and the generosity of our community, our students attend weekly classes taught by credentialed teachers in the areas of visual art, choral and instrumental music, technology, and scientific investigation as part of our Extended Studies Curriculum (ESC) program.

Carmel Del Mar is known throughout the community as a "school with a heart." We have two Special Day Classes for students with moderate to severe disabilities. Our program is considered an exemplary model with students coming from outside the district to access our services. Our students and community have always loved having this program at our school. Students at all grade-levels are excited to work with special needs students, in either mainstreaming or reverse-mainstreaming learning opportunities. These occasions are treasured by our students and provide life-long learning that benefit all that participate.

As a staff our decisions, practices, and structures are all focused on doing what is best for children. We believe in collaboration and in having fun. A collaborative learning environment is designed to touch the heart and provide a sense of belonging ~ for students and teachers. While staff members are conscientious and dedicated, they recognize the importance of laughter, and that kindness matters. Visitors often comment on the evident happiness of our students.

At CDM, our goal is to create a learning environment that is rigorous, innovative, and nurturing as we work together to prepare students for success in a rapidly changing global society. Our proximity to San Diego State University and global businesses bring cultural and linguistic diversity to Carmel Del Mar. We have many bilingual families in our community. While our largest language groups are Korean and Mandarin, we also have students that speak Arabic, Bulgarian, Finnish, French, German, Greek, Hindi, Hungarian, Japanese, Polish, Russian, Spanish, Telugu, and Vietnamese.

At CDM, we encourage the involvement of families, community members, and business partners as we work together to meet the unique needs of each student. Our learning environment is enriched as we celebrate our diversity. We believe that building relationships is critical to meaningful collaboration. When all stakeholders feel they are valued members of the learning community, we believe they develop a sense of ownership and efficacy that transforms teaching and learning.

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#### <u>DataQuest home</u> > <u>API home</u> > <u>Reports</u> > <u>Select School</u> > <u>School Reports</u> > Current Page

### 2012-13 Accountability Progress Reporting (APR)



## School Report - API Growth and Targets Met

2013 Growth

Academic Performance Index (API) Report

California Department of Education Analysis, Measurement, & Accountability Reporting Division 9/19/2013

School:

Carmel Del Mar Elementary

LEA:

**Del Mar Union Elementary** 

County:

San Diego

CDS Code:

37-68056-6110696

School Type:

Elementary

	2013 Growth API Links:
	School Chart
Schoo	ol Demographic Characteristics
Sc	hool Content Area Weights
	LEA List of Schools
	County List of Schools

(An LEA is a school district, county office of education, or statewide benefit

	Charter School 13 APR	2012-13 State API		charter ) 2013 Federal AYP and PI			
Summary	Glossary	Base	Guide	Growth	АҮР	PI	Guide

**Met Growth Targets** 

Schoolwide:

Yes

**All Student Groups:** 

Yes

All Targets:

Yes

#### **Groups**

	Number of Students included in 2013 API	Numerically Significant in Both Years	2013 Growth	2012 Base	2012-13 Growth Target	2012-13 Growth	Met GrowthTarget
Schoolwide	360		946	950	Α	-4	Yes
Black or African American	3	No	•				
American Indian or Alaska Native	1	No					
Asian	82	Yes	970	988	Α	-18	Yes
Filipino	3	No					
Hispanic or Latino	35	No	874	843			
Native Hawaiian or Pacific Islander	1	No					
White	222	Yes	949	948	Α	1	Yes
Two or More Races	13	No	955				
Socioeconomically Disadvantaged	27	No	882	836			
English Learners	51	No	901	935			
Students with Disabilities	55	No	827	837			



# California Department of Education 2014 California Distinguished Schools Program

# **Elementary School Application: Part B**





### **Signature Practices**

Carmel Del Mar School

## **Signature Practice 1 Summary**

1.	Name of Practice: Strategy and Passion Transforms Reading in the Castle						
2.	How long has this practice been in place?						
	☐ Less than 2 years ☐ 2–4 years ☐ 5–8 years ☐ 8+ years						
3.	What is the Target Area? (Choose at least one area.)						
	Target Areas:						
	☐ Career Technical Education						
	Chronic Absenteeism and Dropout Prevention						
	☐ Civic Education Awareness						
	☑ Closing the Achievement Gap						
	☑ Education Supports						
	☐ Nutrition and Physical Activity/Education						
	☑ Parent and Community Involvement						
	Science, Technology, Engineering, and Mathematics						
	☐ Use of Technology						
	☐ Visual and Performing Arts						
<b>4</b> .	What are the target populations? (Check all that apply.)						
	Race/Ethnicity Subgroups:						
	☐ American Indian or Alaskan Native						
	<b>⊠</b> Asian						
	☐ Black or African American						
	☐ Filipino						
	☑ Hispanic or Latino						
	(Continued on next page)						

Carmel Del Mar School

	☐ Native Hawaiian or Pacific Islander
	☑ White
	☑ Two or More Races
	Other Student Groups:
	☑ Socioeconomically Disadvantaged
	☑ English Learners
	☑ Students with Disabilities
	☑ At-Risk Students (Academic, Social, Emotional, Behavioral, or Health)
	☑ English-Language Arts—Students Not Yet Proficient
	☐ English-Language Arts—Advanced Learners
	☐ Mathematics—Students Not Yet Proficient
	Mathematics—Advanced Learners
	☐ Other Core Subject Areas—Students Not Yet Proficient
	Other Core Subject Areas—Advanced Learners
	Other (specify)
5.	What strategies are used to implement the practice? (Check all that apply.)
	Strategies:
	☐ School Climate
	☑ Small Learning Communities
	☑ Parent Involvement
	🔀 Data-Driven Decision Making
	☐ Health Support
	☐ Social/Emotional/Behavioral Support
	☑ Professional Development
	☐ Other (specify)
6.	Is this practice initiated by your district and implemented districtwide?
	Brief answer: No

Carmel Del Mar School

### **Signature Practice 1 Narrative**

#### Rationale/Basis of the Practice

Over the last few years, teachers at CDM have participated in multiple professional learning opportunities to support writing instruction aligned with Common Core State Standards. Our work across the district has provided a clear vision of what powerful learning looks like when teachers become skilled at teaching writing. Students are able to write effectively and eloquently to synthesize, organize, reflect on, and respond to the world around them.

However, patterns emerged that indicated that some of our older students, and many of our younger students, were sometimes struggling as readers. Three years ago, DRA2 data analysis suggested that 20 percent of our primary students were struggling readers. We examined our intervention practices and the resulting data. What we discovered was that many of our previous attempts to support students had not been as effective as we had hoped. In fact, some of the same students were being identified year after year as not meeting grade-level benchmarks in reading. This was particularly true of our students who were identified as ELL and SED. As a staff, we established a need to evaluate our systems and practices for supporting struggling readers.

### 2. Description of the Practice

Our first plan of attack was to study effective teaching practices in reading. We also examined the design of research-based programs to support struggling readers and the fifteen keys to a successful intervention design. A literacy expert conducted workshops for all staff members on the components of a comprehensive literacy framework with specific emphasis on the reading continuum. We looked at what effective readers do and discussed why and how readers sometimes go off track. We also came to a common understanding regarding the importance of the classroom as the first line of instruction.

After a literature and research review, we determined the need to provide coherent essential literacy experiences for all of our readers, especially those who were struggling. We needed an intervention that would strengthen and provide instructional continuity across our campus. In the end, we decided to utilize the Leveled Literacy Intervention (LLI) program by Fountas & Pinnell in grades K-3. The LLI resources comprised a set of research-based materials to provide systematic small-group reading instruction for the purpose of providing early literacy intervention.

To prepare for this implementation, we brought in a specialized literacy coach to provide comprehensive training to all classroom teachers in how to use the materials effectively to develop the strengths and needs of our readers. Specifically, we wanted to support and extend students in thinking within the text, beyond the text, and about the text. Teachers learned how to listen to students read, take records of oral reading, and to then use that data to strategically teach, prompt, and reinforce reading behaviors. Because this training was so much more than just how to use a set of materials, we included all grade-levels and teachers in the training. The trainer modeled all practices with our own students, and teachers benefitted from participation, even if they were not directly in line to implement the intervention. Teachers reported that they found the routines and practices very helpful in supporting their literacy instruction.

The last component of our LLI training was to decide, as a K-3 Professional Learning Community, which students would participate in the first round of intervention. Using DRA2 data, we created our first round of LLI guided reading groups and determined level/lesson starting points. When possible, we grouped students together that were in the same classroom, but if needed, we created groups across classrooms to make sure that students were optimally placed. The LLI lessons were delivered as an instructional double dip with the classroom teachers providing both levels of instruction.

Very quickly, teachers started reporting success with the intervention. Students loved the lessons and the books. They were successful and this enhanced their motivation, confidence, and trust. Every lesson provided a home/school connection. Students would bring home their "take home" books and a literacy activity. These books were at the students independent reading level, and the activities were self-explanatory, accompanied by a short letter for parents that explained the purpose of the task. Parents enjoyed being a part of the process and were excited to see their students as successful readers. The home/school connection facilitated family involvement that further boosted student confidence and achievement.

Two months into our Year One implementation, it became apparent that teachers were becoming more skillful and confident reading teachers using the LLI resources. The program provides a series of exemplary guided reading lessons. The reading behaviors and understandings are accumulative as students progress through the lessons and levels. Teachers started to appreciate the structure and pacing of the lessons. Students successfully interacted with high-quality texts that supported them in developing comprehension strategies and vocabulary. Teachers utilized the lesson guides to integrate word work and writing experiences. Each lesson provided clear comprehensive support to the teacher ~ even providing sample language that the teacher could use as they taught the lesson.

Three months into our Year One implementation, teachers shared that they were taking the lesson structures and strategies and were successfully applying them to other reading lessons, with other students, and with books from our own book room. We were delighted that we were able to generalize our knowledge, understanding, and skills into our literacy instruction for all students.

Students participated in the intervention experience for 6-8 weeks. Each lesson incorporated formative assessment opportunities, which teachers used frequently and skillfully to inform their instructional decision-making. This data was also used during the students' regular classroom instruction for reading. During the intervention period, almost all students made significant progress in reading. Teacher confidence grew as they felt that they really knew their students as readers. They were able to use these insights to support readers throughout the day, not only in language arts, but also in mathematics, science, and social studies. At the end of each cycle, the PLC collaboratively determined which students would participate in the next cycle of intervention.

The LLI program provided immediate targeted instruction for many of our struggling readers at CDM. At the same time, teachers became more skillful teachers of reading, which then

strengthened the reading instruction that all students received. This success was clearly supported by data and testimonials by teachers, students, and parents. In essence, we successfully implemented LLI as a Tier II intervention, but the magic was that the intervention transformed our literacy instruction for all students. Our work at Tier II provided a literacy foundation for Tier I instruction that was rigorous and differentiated as it supported a high-quality balanced literacy framework.

During Year One and Year Two of our implementation, we brought back our specialized literacy coach to provide additional training and coaching for teachers. We also facilitated peer coaching and observations to ensure that we were strictly honoring the lesson structures and practices of quality literacy instruction. We continued to meet together throughout and at the end/beginning of each intervention cycle.

As we trained new teachers, we were able to use our own teachers as models of what an exemplary LLI lesson would look like in action. During Year Two, we also added the next grade-level component, which allowed additional teachers to implement the program and practices at the fourth grade level. Now in Year Three, we are adding the fourth grade component of the program, which will allow us to reach even more students.

One unintended outcome of our intervention was that teachers were better able to evaluate the appropriateness and effectiveness of our instructional materials in the area of reading. Teachers could clearly see the constraints of our adopted reading program, which provided differentiated texts, but not to the level that we required. We had a book room that housed guided reading books, but it became apparent that the quality and consistency of our selections did not always adequately support our readers. We started to network with other schools to find publishers of high-quality guided reading books. We then slowly, and methodically, started updating our collection. Our community got involved and focused their fundraising efforts on supporting the purchase of high-quality guided reading books for our book room.

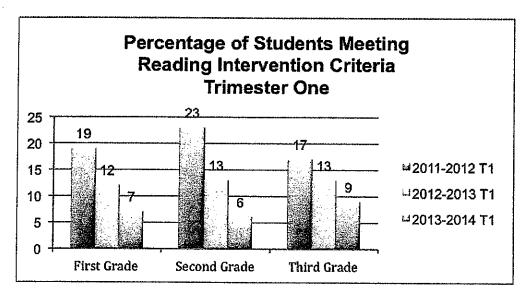
Research on struggling readers clearly indicates that students need access to books they can read, and that they need time to read. At the end of Year One, we experienced our second unintended outcome when we started looking for additional time for students to read. We examined what are students were doing independently during language arts. What we discovered was that students were spending a lot of time doing worksheets/workbook pages about reading, but they were not actually spending much time reading. We also examined the writing that was occurring during this independent work time and determined that students were often engaged in low-level activities that lacked relevance and authenticity.

Before we left for summer break after Year One of LLI, teachers came to me and asked if they could do a Teachers as Readers project on the book, *The Daily 5: Fostering Literacy Independence in the Elementary Grades.* I agreed and offered to purchase the book for any teacher at CDM that wanted a copy. The response was so overwhelming, that in the end, our school-wide PLC participated in the reading of the *Daily 5.* During Year Two, we drafted a school-wide goal that students would have the opportunity to independently engage in rigorous, authentic literacy tasks, rather than filling out worksheets and workbook pages. We are happy to report that our workbooks are gone, and our students are

participating in relevant and authentic literacy tasks while teachers provide small group literacy instruction.

### 3. Results of the Practice

We are now in Year Three of implementing our intervention practice using the LLI program. Our data clearly demonstrates that fewer primary students at CDM require a reading intervention as measured by the DRA2. Using a DRA2 4 as the criteria for first grade intervention, 19% of our first graders qualified in Year One, 12% qualified in Year Two, and 7% qualified in Year Three. The same trends were evident in second and third grade. In second grade, using scores falling below a DRA2 16, 23% qualified for the intervention in Year One, 13% in Year Two, and 6% in Year Three. In third grade, using scores below a DRA2 28, 17% of students qualified in Year One, 13% qualified in Year Two, and 9% qualified in Year Three.



At CDM, our implementation of LLI has had a positive impact on all of our readers. We believe this is true because the foundation and scaffolds of this program are rooted in good teaching. As the gap closes for our struggling readers, more time is available to further support and extend our Tier I instruction to differentiate to meet the needs of all readers.

Other elementary schools in our area have heard about our success and have asked to observe and learn about our program. We are happy to share! We show them how we have used the LLI resources to systematically support our struggling readers. We also highlight how the teaching moves in LLI represent best practices in literacy instruction. We emphasize how building a robust book room has further supported our teachers at all grade-levels to provide differentiated reading instruction for all readers. Daily 5 has become a vehicle to set our students up for success as independent readers and writers. We are proud of the progress we have made in three years, and one thing is clear: teachers, students, and parents have never been more excited about reading at CDM!

Carmel Del Mar

## **Signature Practice 2 Summary**

7.	Name of Practice:						
	A Shift in Thinking: Problem Solving in Mathematics						
8.	. How long has this practice been in place?						
	Less than 2 years						
9.	What is the Target Area? (Choose at least one area.)						
	Target Areas:						
	☐ Career Technical Education						
	☐ Chronic Absenteeism and Dropout Prevention						
	☐ Civic Education Awareness						
	☑ Closing the Achievement Gap						
	☑ Education Supports						
	☐ Nutrition and Physical Activity/Education						
	Parent and Community Involvement						
	Science, Technology, Engineering, and Mathematics						
	☐ Use of Technology						
	☐ Visual and Performing Arts						
10.	What are the target populations? (Check all that apply.)						
	Race/Ethnicity Subgroups:						
	American Indian or Alaskan Native						
	🔀 Asian						
	☐ Black or African American						
	☐ Filipino						
	☑ Hispanic or Latino						
	☐ Native Hawaiian or Pacific Islander						
	☑ White						
	☑ Two or More Races						
	(Continued on next page)						

CCSS in Mathematics.

Carmel Del Mar

Other Student Groups:
▼ Socioeconomically Disadvantaged  ■ Comparison    ■ Com
☑ English Learners
⊠ Students with Disabilities
At-Risk Students (Academic, Social, Emotional, Behavioral, or Health)
☐ English-Language Arts—Students Not Yet Proficient
☐ English-Language Arts—Advanced Learners
☑ Mathematics—Students Not Yet Proficient
☑ Mathematics—Advanced Learners
☐ Other Core Subject Areas—Students Not Yet Proficient
Other Core Subject Areas—Advanced Learners
☐ Other (specify)
11. What strategies are used to implement the practice? (Check all that apply.)
Strategies:
School Climate
☐ Parent Involvement
☑ Data-Driven Decision Making
☐ Health Support
Social/Emotional/Behavioral Support
Professional Development
Other (specify)
12. Is this practice initiated by your district and implemented district-wide?
Practices individualized to Carmel Del Mar but congruent with state and district priorities for
and district profites to

Carmel Del Mar

### **Signature Practice 2 Narrative**

#### Rationale/Basis of the Practice

Historically, the majority of students at CDM have scored in the proficient and advanced ranges on the CST in mathematics at all tested grade levels. In past years, in many classrooms, the mathematics textbook had become the curriculum, and teachers moved from lesson to lesson within each chapter. Teacher presented an algorithm, modeled the steps, and then assigned problems from the book for students to practice. For homework, students independently completed additional problems using either the textbook or practice pages from one of the textbook-provided workbooks.

Often at night, parents would attempt to help their students if/when students were not able to successfully complete their homework. While this might have been frustrating, it was also a familiar and predictable routine ~ not unlike how many parents themselves had learned mathematics.

The problem, however, was that students could not solve problems in the real world that required mathematics. They followed algorithms without understanding how/why the algorithms worked, and if they couldn't remember the steps to the algorithm, they were completely lost. When given a problem from the real world, students couldn't think their way through the problem because they lacked the mathematical understanding. At CDM, we knew that the Common Core State Standards (CCSS) were coming, and that the new standards would require a different kind of thinking. We wanted mathematics to be relevant, authentic, and exciting for our students. At CDM, we were ready for a change.

### 5. Description of the Practice

The first step in addressing our dilemma was to change how we instructionally grouped our students. In the upper grades, we had always pretested students at the beginning of the year and then sorted them into three different classes for mathematics — a high, medium, and a low class. While technically students could move among the different levels depending on their performance on textbook assessments, this movement rarely happened. The flexible groups turned out not to be so flexible. We knew that the research did not support this type of instructional grouping, but we were hesitant to make a change because we worried about how our community would handle the shift.

In the spring of 2012, we decided that we would not group students in mathematics for the following year. To prepare for this shift, we studied the research on ability grouping in mathematics. While the research supported our intentions, we knew that we would need to convince parents that this change was in the best interest of students. When Back to School Night arrived, teachers used prepared talking points highlighting the research on grouping students in mathematics. They also explained how they would effectively

differentiate mathematics instruction for their students. Teachers also emphasized how algebraic reasoning was a domain of the CCSS that all students would receive instruction. We were very pleased when our parent community supported our decision to make this shift. CDM is now in Year Two of teaching mathematics with heterogeneous groups. While there have been occasional bumps in the road, the overall shift has been successfully maintained.

Last year, elementary schools across our district came together to participate in a series of workshops on the CCSS in mathematics. The elementary principals participated in extensive professional learning in advance so that they could effectively plan and present the workshops to their teachers. The workshops were successful, and teachers were very receptive. Teachers at CDM were especially excited because it was evident that the workshops would support them in shifting their focus in mathematics from algorithms to problem solving.

As a PLC, we learned about the major shifts within mathematics in the Common Core (CC), which would provide focus, coherence, and rigor to our instruction. We also learned about the Standards for Mathematical Practice (SMPs), which defined what mathematically proficient students would be able to do as they interacted with math content. Immediately after the SMP workshop, teachers at CDM introduced the language from the SMPs into their lessons and started explicitly teaching students how to apply them. The SMPs were a critical component of the CC, and we wanted to utilize them to promote greater engagement with math content. We also learned the difference between difficulty and rigor, and we evaluated our teaching with regards to Depth of Understanding (DOK). In our grade-level PLCs, we analyzed lessons to see how we could increase the rigor by strategically applying the SMPs and the DOK.

Also last year, our kindergarten and third grade teams had the opportunity to participate in Cognitively Guided Instruction (CGI). Other grade-level teams put in their requests to participate in CGI as soon as openings were available. The teams-in-training reported that the work they were doing in CGI was beautifully aligned with the CC, and that their learning was changing their ideas about best practices in teaching across all academic content areas.

Last year during the spring, we participated in a Teachers as Readers project around the book, *Number Talks: Helping Children Build Mental Math and Computation Strategies*. When a teacher conducts a Number Talk, students engage in a conversation around a problem where they attempt to mentally solve the problem with accuracy, efficiency, and flexibility. By talking about their strategies, students build conceptual understanding in mathematics. The reading of this book galvanized teachers. They immediately started conducting *Number Talks* with their students. Teachers were willing to take risks and were

anxious for feedback. By the end of the school year, every teacher at CDM had incorporated *Number Talks* into their daily teaching repertoire.

The teachers at CDM called this past summer, the Summer of Learning. Four of our teachers signed up to take a series of workshops specifically on the Standards of Mathematical Practice. Three grade-level teams fast-tracked their learning of CGI by participating in a special Summer Institute. Teachers were thinking about mathematics in a whole new way that was rigorous, conceptual, and authentic.

At the start of this year, we participated in a workshop on how to utilize our new Math Tool Kit and instructional timeline, which would support us with the new CCSS and SMPs. Each teacher, and grade-level team, created a performance evaluation goal in the area of mathematics that would highlight student achievement in math. These goals were congruent with school-wide achievement goals that highlighted problem solving in mathematics.

Every grade-level team also participated in a Family Math Night where parents learned about the instructional shifts of the CCSS in mathematics. Parents also learned how conceptual understanding in mathematics could be developed through word problems. Sample word problems were given to parents. When parents shared out, a variety of strategies had been applied to solve the problem. Parents had an opportunity to explain their thinking to other parents. The problems they solved clearly demonstrated how real problems often involve more than one type of mathematics.

This year at CDM, all classroom teachers are participating in training for Cognitively Guided Instruction, a methodology that supports problem solving and conceptual understanding in math. Teachers are also learning how to integrate their understanding of the CC with a new standards-based report card. In their PLCs, teachers have analyzed the line items for mathematics on the new report card to determine what it looks like when a student is "secure" in their understanding. Teachers have also worked with their teams to analyze a performance task that was administered to their students as a means of identifying areas of student strength and weakness and instructional strategies to support student growth. Teachers will continue to participate in a series of workshops on mathematics presented by their principal. In these workshops, they will continue to develop their understanding of grade-level standards and how to utilize the Math Toolkit, instructional timeline, and other resources to inform next steps in instruction.

In the upcoming second and third trimesters of this school year, the Director of the UCLA Mathematics Project, will provide an enrichment series for students in the area of algebraic reasoning. Teachers will participate in these workshops to experience how problem solving can be used to develop algebraic thinking. These workshops are intended to help teachers

understand that students can engage in algebraic thinking when given the opportunity, and that with support, teachers can extend arithmetic to algebraic thinking.

#### 6. Results of the Practice

While we don't have a clear pattern of data yet to support increased academic achievement in mathematics, our change in instructional practices can be documented with an instructional walk-through. In every classroom, teachers are teaching mathematics differently. We don't have high, medium, and low classes anymore. Instead, we have classes that are differentiated for students by using different number choices while students are engaged in authentic problem solving tasks.

Number Talks is a part of almost every math instructional block. In these short sessions, students develop mental math and conceptual understanding simultaneously. Teachers no longer stand at the front of the classroom and "perform" mathematics so that students can learn the steps to an algorithm. Instead, classes often start with real world problems that students are encouraged to solve in a variety of ways. Students talk, reason, and justify their thinking. Students are encouraged to make sense of complex situations, combine different areas of mathematics, and explain their reasoning.

Students have access to a variety of tools and are free to select the ones that make the most sense to them. The teacher is a facilitator ~ asking questions, giving descriptive feedback, and scaffolding instruction to assist students in developing more efficient strategies. Students are reading, writing, and talking about math. It's practical, real, and fun!

Teachers describe this instructional shift as sometimes stressful, but always exciting! They have never worked so hard, but they would never go back to the way they taught mathematics before. In a recent survey, teachers were asked, "When you think about your instructional practices, what is the one area where you think you have grown the most?" The majority of teachers at CDM reported that problem solving in mathematics is where they have grown the most.