Twenty years ago, 50 people representing elementary education came together to do something unheard of at the time: they wanted to learn how to build leadership within the science education community. These folks—a statewide director, one secretary and 25 newly appointed staff developers—created the California Science Implementation Network (CSIN), the basis for the K-12 Alliance. The ripples of that initial gathering are still felt today.

With the success of CSIN, middle and high school programs (SPAN and SS&C) were soon created to equally address reform issues on those levels. In time, all three organizations joined together to formally create the K-12 Alliance.

To date more than 5,000 elementary schools, 600 middle schools and 325 high schools have been impacted by this professional development program. Thousands of teachers and millions of students have
WHAT'S THE BIG IDEA?

The K-12 Alliance is the embodiment of the following quote:

Be aware of your thoughts, they give rise to words
Be aware of your words, they become your actions
Be aware of your actions, they determine your character
Be aware of your character, for from it flows vision
Be aware of your vision, from vision comes your destiny

The K-12 Alliance is exposed to the “Big Idea.” Currently, the K-12 Alliance is a partner in the 13 California Math Science Partnership Programs.

But the K-12 Alliance is more than mere numbers. It is the synergy of people who come from all walks of education to contribute to productive work. Though the years, K-12 Alliance folk have contributed to state and local policies, provided seminal work in building professional learning communities (Teaching Learning Collaborative), building conceptual frameworks (conceptual flows/MAKING CONNECTIONS), using assessment for reflective practice (CAP/CLAS/PASS/CAESL), and creating model instructional materials (Project Storyline/A Child’s Place in the Environment/Earth’s Resources/Strategic Science Teaching).

Joining the group as the Regional Director for San Diego in 2000, Kathy DiRanna is back again in 2005 as the project director for the Vista MSP.

Be aware of your vision, from vision comes your destiny. Enjoy a view from the past 20 years as we celebrate in pictures and in deeds, the work, the networking, the warmth and the joy of creating quality science programs for students in California and across the nation!
The Creation of a TOSA

BY GRETA SMITH

Teachers on Special Assignment (TOSA) are not born — they are created. They are formed much in the same way that the Earth smashes, grinds, pulverizes, heats, cools and smooths rocks from one type into another.

Taken from that known classroom emotion and thrust into a world of pseudo-administration, many classroom teachers feel out of their element at first — not to mention having experiences that smash, grind, pulverize, heat, cool and smooth them into something different and new.

I became a TOSA at the end of the 2004-2005 school year when I had the task of moving out of my familiar classroom and into the great unknown.

Once my colleagues heard where I was headed, they all looked at me differently. I have to admit, I looked at myself differently. Here I was, a mere teacher, now having an official “office” at the district with a classroom to use for Teaching Learning Collaboration (TLC) planning days. In many ways, I felt I was swayed over to “the dark side” because of that office.

But when I saw the place where I was to work for the next academic year, I couldn’t help but laugh. This was certainly no temptation! The walls did not go quite to the ceiling; you could hear everything going on in the building around you. The location was in a far corner — most of the time people weren’t even aware that you were there.

Yes, it was somewhat disappointing, but I told myself, it could be worse. Then I looked at the walls — avocado green. OK, it was worse.

While I adjusted to the office space, I realized that doing the job was the bigger challenge. Try ing to sell people on a new idea that might actually change their way of thinking is very difficult.

Participants were anxious to come during the summer and, struggles arose when participants realized they would also have to “do something” with their learnings during the school year. Attempting to move people in a direction they are not ready to move is a challenge. If you can recognize this process as something different and new, then you truly do become something different than what you once were.

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Yet, through the struggles I know that my presence/guidance has impacted more than 70 teachers in a positive way. Over the course of the year, many people asked me, “Do you like what you are doing?” My answer was always the same, some days yes and some days no. I guess this is true of any job that involves participation, human beings and life in general.

My vision for the year was to impact teachers who would in turn impact students. I see movement, but I am always too impatient and I tell myself that change takes time.

I try to think of a rock — of the smashing, grinding, pulverizing, heating, cooling and smoothing that has to take place to change into something different than it once was. If you can recognize this process as what it is — one of change — then you truly do become something different than what you once were and so do those around you. The key challenge is to make sure that it’s all for the better!

GREEN CLASS — Finalist in the Jiminy Cricket’s Environmental Challenge

Mike Kenny (left) from George I. Sanchez Elementary assisted his students with the project “S.O.S. (Save Our Species)” in which they explored how to help endangered species in California and around the world.

The program is the result of a unique partnership with many organizations including: The K-12 Alliance, The Walt Disney Company, the California Department of Education, the California Environmental Education Interagency Network (CEEIN), the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, and California Regional Environmental Education Coordinator (CREEC) Network.

To date, more than one million students have enrolled in the program that challenges students to think and act responsibly toward the environment.

The Environmental Challenge encourages students to use their standards-based content knowledge and develop action projects that target real-world environmental problems. The challenge helps students select open-ended projects or problems with more than one approach or answer.

Students engaged in the Environmental Challenge generally work in cooperative groups for extended periods of time and are encouraged to seek out multiple sources of information about the topic of their project.

Though the end product is the driving force in project-based learning, it is the content knowledge and skills acquired during the project that are important to the success. And best of all, students have fun while they learn.

Consisting of two parts, the Environmental Challenge is made up of the pledge and the class project competition. The level of commitment is up to the teacher and their students. The pledge entails a small commitment, while the class project competition requires a more comprehensive project. It’s easy, exciting and educational!

Of the many K-12 Alliance teachers who participated in the 2006 Environmental Challenge, two teachers from the Garvey School District in Rosemead helped their classes to become finalists.

Mike Kenny from George I. Sanchez Elementary assisted his students with a project entitled “S.O.S. (Save Our Species)” in which they explored how to help endangered species in California and around the world.

Fifth grade students across the state are being encouraged to “think green” thanks to a program that engages them in authentic, “real world” project-based learning.

First launched in 1994, Jiminy Cricket’s Environmental Challenge is a challenging and fun hands-on experience that compels students to learn more about their environment, the State of California and show them why it’s cool to care about the earth.

Rising Collaborations

BY JODY SKIDMORE

A s the K-12 Alliance moves boldly through 2006, four more partnerships have joined in our march for improved science and mathematics education.

We happily welcome Marysville Joint Unified School District, Palm Springs Unified School District, Vista Unified School District and Wiseburn School District to our network. With four more CaMSPs added to 13 — we certainly have lots of work ahead!

A major component of the CaMSP is establishing partnerships with local colleges. Many times, these partnerships are a new connection, requiring a little more time, energy and trust to develop. But the end result can be amazing work in which all parties benefit from the synergy.

Many CaMSPs have industry partners that want to be involved with schools to promote math and science content knowledge, and inquiry-based and student-centered learning to increase student understanding. The professors are now using such K-12 Alliance tools as worksheets and effective questioning.

Our new partners of higher education include: CSIU San Marcos, Palomar Community College (Vista MSLP), CSIU San Bernadino, College of the Desert (Palm Springs MSLP), Pepperdine University, UCI Los Angeles, Los Angeles Trade-Technology College (Wiseburn MSLP), CSU Sacramento and Yuba Community College (Marysville MSLP).

An interesting collaboration this year took place in Marysville. Yuba Community College provided science content instruction and partnered with CSU Sacramento to establish a CT website. Now Marysville teachers can directly access appropriate content questions. Teachers get answers and professors get service hours — what a deal!

Another great collaboration is occurring with teachers in Vista who have an opportunity to “go back to college” where they can use scientific materials and tools and have real-life lab experiences. Adding to that, mathematics coaches will also be working with elementary science teachers for the purpose of exploring mathematics applications to science curricula.

Palm Springs Unified School District’s collaboration with College of the Desert and CISO San Bernardino is further enhanced with the newly added UC Riverside faculty member Dr. Pam Clute who is part of the leadership team for improving mathematics education in the Coachella Valley.

Many CaMSPs have industry partners that want to be involved with schools to promote math and science as a way inspire the workforce of tomorrow. They provide financial and educational resources to help meet the schools’ educational needs. This year, we welcome our new industry partners: Northrop Grumman, Buzo Allen Hamilton and the Appeal Democrat Newspapers.

Overall, collaboration is an effective means to the desired end. It is an inclusive and reciprocal approach to getting what both collaborators want. With a clear strategic vision, acknowledgement and respect for partners’ expertise, a will for positive intent, and shared responsibility for the overall success of the program, successful collaborations are united in a desire to work together for the greater good.
Summer of Fun — and Learning!

Imagine! The 20th year of summer K-12 Alliance programs was a huge success for developing conceptual understanding enabling teachers to be master teachers in their classrooms. After first twenty years, the motto continues: “work hard, learn lots and enjoy.”

Snapshots this year included seeing staff developers and region center directors regional directors “net- ting” the state together and everyone leading the charge. Highlights from this year’s institutes are wide and varied. Here’s our annual roundup.

- **Tulare Institute**
  Tulare Community College graciously gave us their restaurant for our main meeting room for our 4th, 5th and 6th grade teachers from Marysville Joint Unified School District. The 44 teachers were immersed in 5th grade chemistry and 4th grade electricity and magnetism principles.
  - The days were incredibly hot, hard, learn lots and enjoy.
  - Tulare cows were swishing their tails to keep cool, but in a new school building, 60 returning lead teachers were in air conditioned coolness having a fantastic time learning content from the calves. How’s that human body?
  - What is the role of water on our planet? Let’s learn more about electricity and magnetism!
  - Highlights of the week included a visit to the Edison AG-TAC center along Hwy. 99 where electricity is the main focus and a visit to see a cadet at the UC Davis satellite campus in Tulare.

- **Marysville Institute**
  Although Marysville Joint Unified District attended the two-week in-service on Mathematics in Everyday Life, a “jump-start” for quality math programs.
  - Palm Springs Math Opens Doors
    - The New Palm Springs CaMSP grant linked with a mathematics institute where 30 teachers from Palm Springs attended two weeks of mathematics content and pedagogical skills, while 4th and 5th grade teachers sharpened their science knowledge and skills.
    - Teachers from the Vista summer institute were electrified with a field trip to the General Atomics fusion facility in San Diego. Participants were able to visit the huge General Atomic electromagnet and observe scientists at work. The General Atomics staff then extended the learning by providing interactive workstations on magnetism and electricity for teachers learn from and enjoy.
  - Palms Springs Palm Springs Science Institute
    - Science and mathematics were alive and well in Vista. Middle school teachers tackled mathematical content and pedagogical skills, while 4th and 5th grade teachers sharpened their science knowledge and skills.
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As a statewide finalist in 2006 Kenny’s class received a Radio Disney lunch and entertainment for all fifth graders at Sanchez.
  - The grand prize for the state winner was an all expense paid trip to Dollywood for the entire fifth grade class and a parade in their honor.
  - Join your K-12 Alliance colleagues and use the environment as a context to strengthen your students’ skills and knowledge in language arts, science and mathematics. Check out the National Geographic, the environmental website, www.jcclads.org, to enroll in this year’s challenge.
  - The benefits of complimentary environmental education resource materials are available by calling the informational hotline at (800) 290-0299.

PROJECT-BASED LEARNING CONTINUED FROM PAGE 3

San Diego City Schools

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