INNOVATE

EDUCATE

EMPOWER

KRAUSE CENTER *for* INNOVATION
FOOTHILL COLLEGE

Table of Contents

MISSION

Krause Center for Innovation: Advancing leadership by providing innovative professional learning for educators who seek to transform teaching to inspire students to be lifelong learners.

Letter from the Executive Director

Now in its 16th year, the Krause Center for Innovation has served as a regional hub for Silicon Valley educators providing critical professional learning programs for more than 17,000 educators. Our focus has been on creating confident teachers, developing teacher leaders, and helping educators undertake new teaching methodologies and gain confidence in using educational technology with their students.

Teachers from 24 Bay Area districts participated in KCI programs during the 2015-16 academic year. These educators have taken their new skills back to the classroom and have impacted over 80,000 students. As we have ramped up our tailored professional learning programs for schools and districts, we are reaching more teachers each year. Conservatively, since its inception in 2000, 17,000 teachers have been trained, and over a million students have benefitted from KCI-trained teachers. These educators focus their efforts on providing students with active learning environments, where students thrive as creators of content and projects, as opposed to being passive learners. The investment yields a high ROI: providing ongoing professional learning for educators pays off year after year as teachers impact hundreds of students over the course of their careers. We strongly believe that when we focus on teachers, our students experience the benefits and thrive.

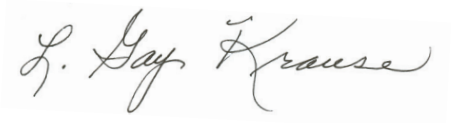
The 2016 Annual Report provides a window into how the KCI continues to improve our flagship programs (MERIT and FAME), as well as information on our new programs. This year we launched the MADE (modeling, analysis, design and engineering) Science program to support teachers and districts in implementing the Next Generation Science Standards for grades K–12. In addition, we initiated a new computer science program that is appropriate for all disciplines, which includes computational thinking and the basics of computer science, including some fundamental coding work. The program's purpose is to help educators integrate computational thinking and computer science-oriented problem solving into the classroom.

In 2017, we plan to expand this work in partnership with Cal State TEACH (CST) to reach the hundreds of CST pre-service teachers, who are earning their credentials. We anticipate the state will ultimately accept computer science as part of the regular classroom curriculum.

Beyond California, the KCI successfully worked with public school STEM teachers on the Big Island of Hawaii and conducted two Mini MERIT programs at the University of Hawaii in Hilo and Waikoloa. We have a two-year grant from the Hawaii Community Foundation to do this work and are looking at a possible expansion model to work with some of the private schools on the Hawaiian Islands.

While educational trends and technology may change, the outcomes we strive for are centered on our core values: Innovate, Educate, Empower. We innovate through transforming curriculum, practice, teaching, and learning. We focus on educating one of the most important workforce sectors—educators. And ultimately, we seek to empower teachers and students through effective practices that transform the learning experience for all students.

Sincerely,



Gay Krause
Executive Director
Krause Center for Innovation

KCI Program Outcomes & Accomplishments

From September 1, 2015 to August 31, 2016, KCI used donations and grants from individuals and foundations, support from Foothill College, and revenue from professional development services to design, develop, and implement the following professional development programs and events:

- **MERIT** (Making Education Relevant & Interactive through Technology)
- **FAME** (Faculty Academy for Mathematics Excellence)
- **Tailored Professional Learning Programs** for Schools & Districts
- New Programs Launched: **MADE Science** (Modeling, Analysis, Design & Engineering) and **Computer Science Program**

MERIT (Making Education Relevant & Interactive through Technology)

MERIT is the KCI's premier research-based professional learning program for educators. It is designed to help teachers bolster their curriculum with technology-enhanced learning activities to motivate, challenge, and inspire diverse learners, with students who are college and career-ready as the end result. The MERIT program uses qualitative and quantitative measures to determine if a well-trained teacher using engaging technology can improve student learning. Participants have the opportunity to learn and contribute to a variety of resources for collaboration, and are required to design projects that not only provide dynamic learning experiences for their students but also create resources that will be of value to other teachers and students.

> *"This has been one of the highlights of my educational experience. I appreciate this opportunity to learn from the most amazing educators. And this is only the beginning of what is to come... I can't wait to see the impact on my learners!"*
>
> **-MERIT 2016 Participant**

About MERIT 2016

MERIT is a ten-month program that starts each spring quarter, includes a two-week intensive Summer Institute, and continues with follow-up classes in the fall and winter quarters. MERIT 2016-17 is designed to create a technology-focused professional development experience for educators which allows them to transform teaching and learning in the classroom and school site. The two-week intensive Summer Institute was held July 5 through 15 at the KCI.

The MERIT 2016 cohort is comprised of 49 teachers, with 44 coming from the following counties: Alameda, Contra Costa, Santa Clara, San Mateo, and Ventura. Five participants joined the program from Mumbai, India. The teachers from Mumbai—all from R.N. Podar School—brought with them a global perspective and tremendous enthusiasm for the program. The cohort consisted of 24 elementary, 12 middle school, and 13 high school teachers.

MERIT is an immersive program that includes ongoing professional learning beyond the Summer Institute throughout the academic year. Teacher participants continue to develop their skills while creating student-centered classroom projects that use digital media. MERIT teachers are responsible for producing multiple projects to ensure that what they learn is integrated into their curriculum planning and courses throughout the school year. Teachers are required to report on their progress and continue to receive feedback from KCI instructors and peers. The MERIT leadership team provides explicit training on how teachers can share their new expertise with colleagues at their schools, districts, and conferences.

At its heart, MERIT is focused on specific goals and outcomes:

- **Create** a 21st century classroom environment that models critical thinking and problem solving, communication, collaboration, creativity and innovation for all learners.
- **Integrate** innovative technology tools and processes into the learning environment that enhance student engagement and learning.
- **Design** effective and efficient technology-enriched, student-centered learning projects that improve learning outcomes.
- **Develop** teacher leadership in peer coaching, mentoring, and training skills for school and district venues, as well as for future conference presentations at the local, state, and national levels.

Each year, MERIT evolves to focus on the latest educational trends and technologies, all based on sound pedagogical practice. This year, under the leadership of Roni Habib, MERIT program director and expert in social-emotional learning, the participants began with a grounding in social-emotional learning (SEL), which can empower teachers and students. SEL advocates intend to use social-skill instruction to address a variety of topics, including academic discipline, behavior, and safety. SEL strategies, advocates say, can also help students of all ages become self-aware, manage their emotions, form good relationships, make positive choices, and build healthy social skills such as empathy, appreciating differences, and considering alternative perspectives. Creating such an environment is instrumental in helping students find their voice and excel in the classroom.

MERIT 2016 Accomplishments

> *"I found answers to questions that I've had for a very long time—both personal and professional. This was very transformative for me. I can now envision my second act! And I'm going to be damn good at it. I feel strongly that I'm going to be an agent of change in my school district."*
>
> **-MERIT 2016 Participant**

Teachers come to MERIT knowing that they will be challenged to change their teaching practice by integrating technology that will enhance student engagement and learning. Teachers are asked to profile themselves regarding their comfort level in using technology before and after the Summer Institute. They are provided four categories: Early, Developing, Proficient, and Advanced (see chart on next page for definitions and responses).

In the pre-Summer Institute survey, 42% of participants considered themselves advanced—prepared to develop new learning environments that use technology as flexible tools so that learning in their school/

district has become more collaborative, interactive and customized. This is actually a high percentage in comparison to past MERIT cohorts. However, this higher tech-skilled cohort still made significant progress. Post-Summer Institute, the percentages changed significantly with 78% considering themselves advanced. Ninety-four percent of the teachers rated themselves in the proficient or advanced categories.

Teacher Technology Profile	Pre-Institute Responses	Post-Institute Responses
EARLY: I am beginning to feel comfortable using technology. I use it mainly as a productivity tool (email, Internet browsing, word processing).	2%	0%
DEVELOPING: I successfully use technology for increased productivity (designing newsletters, keeping grades), and to enrich curriculum (research, lesson planning).	12%	6%
PROFICIENT: I confidently use technology as a tool for research, lesson planning, multimedia presentations and/or simulations. I integrate technology into my work. I have an instructional website. I use scanners, digital cameras, and mobile wireless technology where applicable.	44%	16%
ADVANCED: I'm prepared to develop new learning environments that use technology as flexible tools so that learning in my school/district has become more collaborative, interactive and customized. I work with my colleagues to use technology for assessment, curriculum application, differentiated instruction, communication and collaboration.	42%	78%

Teacher Comfort Level in Using Technology, Post-MERIT Summer Institute

When asked whether the Summer Institute achieved the goals of the program, the participants responded very positively as follows:

96% agreed/strongly agreed that the Summer Institute modeled a 21st century classroom environment that demonstrated critical thinking and problem solving, communication, collaboration, creativity and innovation.

94% agreed/strongly agreed that the Summer Institute integrated innovative technology tools and practices into the learning environment that enhanced engagement and learning.

92% agreed/strongly agreed that the Institute guided development of their technology-enriched, student-centered learning projects designed to improve student learning outcomes.

90% agreed/strongly agreed that the Institute presented and modeled assessment strategies for educational technology projects, teaching practices, and learning outcomes.

80% agreed/strongly agreed that the Institute developed their leadership in peer coaching, mentoring, and training skills for school and district venues, as well as for future conference presentations at the local, state, and national levels.

> *"THANK YOU, THANK YOU, THANK YOU!!! MERIT has put me on a new path that I was too afraid to traverse on my own. I pray that I will be able to give to someone else the way the MERIT instructors have given to me. I will never teach the same way again!! I have truly been transformed and will continue to stretch, grow and inspire those around me."*
>
> **-MERIT 2016 Participant**

Teacher Confidence Level as a Result of MERIT

One of the main goals of MERIT is to build teacher confidence in order to effectively implement new teaching methodologies, including technology, as part of their curriculum. Results of this year's survey definitely confirm that the 2016 cohort participants built their confidence levels.

96% agreed/strongly agreed that they felt confident they have the necessary skills to use instructional technology for teaching.

96% agreed/strongly agreed that they can teach relevant subject matter with appropriate use of instructional technology.

94% agreed/strongly agreed that they are confident in using instructional technology effectively in their teaching.

96% agreed/strongly agreed that they can select appropriate instructional technology for a standards-based curriculum.

96% agreed/strongly agreed that they can regularly incorporate technologies into their lessons in order to enhance student learning.

88% agreed/strongly agreed that they can help students when they have difficulty with instructional technology.

96% agreed/strongly agreed that they can share ideas and collaborate with other teachers using instructional technologies.

MERIT: High Quality Professional Learning

The KCI actively seeks feedback from participants in order to constantly improve programs. MERIT is no exception. Teachers were asked a series of questions regarding program effectiveness and quality. They were provided a five-point rating scale (from strongly disagree to strongly agree). The results are as follows:

96% agreed/strongly agreed that the technical knowledge of the instructional team was excellent.

96% agreed/strongly agreed that the Summer Institute showed them how to facilitate and inspire student learning and creativity.

92% agreed/strongly agreed that the Institute was well organized.

96% agreed/strongly agreed that the instructional team was well prepared to lead instruction.

92% agreed/strongly agreed that the instructors consistently used active learning methods, such as allowing time to talk, think, and refine new practices.

96% agreed/strongly agreed that they were inspired to continue engaging in professional growth and leadership.

> *"The MERIT instructors were amazing, building confidence and sharing an incredible wealth of knowledge. The program was in-depth and rigorous, but just when it seemed like it might overwhelm, we would work on an activity that pushed us over the hump and got us to a place of even greater productivity."*
>
> **-MERIT 2016 Participant**

FAME (Faculty Academy for Mathematics Excellence)

FAME is a nine-month professional development program for middle school and high school mathematics teachers. It is designed to increase student achievement in pre-algebra and algebra courses, reduce the achievement gap, and promote the use of technology to enhance the teaching and learning of mathematics. Teachers are recruited from Santa Clara and San Mateo county schools with significant numbers of English language learners (ELL) and low-income families to assist these students in preparing to take algebra in the eighth or ninth grade.

> *"I absolutely LOVED learning all the new math strategies. This was so powerful and I am so excited to implement and try new things in my classroom. The instructors were awesome and so helpful. I learned so much about teaching math!"*
>
> **-FAME 2016 Participant**

About FAME 2016

The FAME program is in its seventh year, and the KCI unveiled an ambitious agenda for the program this summer by giving teachers a choice between a hybrid or blended program (both online and in-person) or a traditional program (in-person only). Twenty-three teachers from Santa Clara and San Mateo counties participated in the program: 11 in Blended FAME and 12 in Traditional FAME.

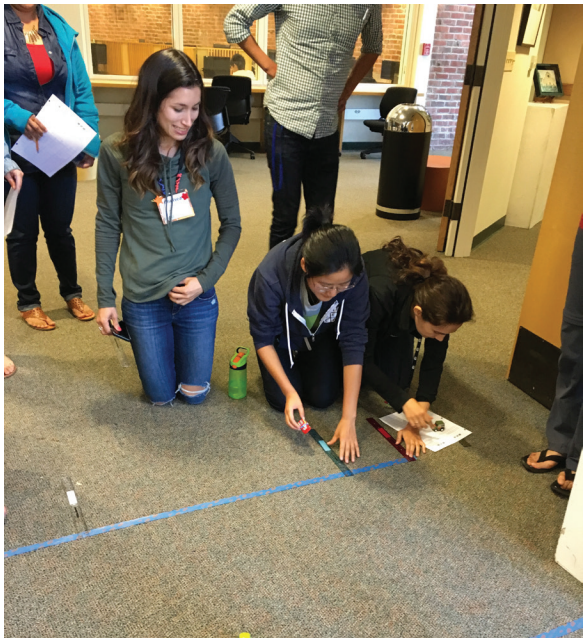
In its pilot year, the Blended FAME offering was developed from the original FAME curriculum, and both programs are Common Core-based. The KCI sees the value in moving toward a hybrid model of instruction, in which participants still meet for group work, but have the opportunity to complete 50% of the program online. During this pilot, participants completed 30 hours of collaborative, face-to-face sessions, with the remaining 30 hours accomplished via online learning activities. This allows teachers greater access to high-quality professional learning and scheduling flexibility, since many teachers cannot attend a 10-day program, but can attend for five days.

The KCI's Traditional FAME program was conducted in the same format that participants have experienced over the last six years—entirely in-person, with participants attending a two-week Summer Institute in July. All FAME participants attend four follow-up sessions during the academic year.

While the goal was to have the curriculum of the two programs mirror each other, some content variation did occur since the instructional teams were different, with each team bringing its own creativity to the programs. For example, this year traditional FAME included computer science exercises that introduced the cohort to math-based computer science tools and projects. The team also added a science, technology, engineering, art and math (STEAM) day, featuring engaging activities that focused on how STEAM subjects can be incorporated into math instruction. We learned a valuable lesson: it's difficult to keep a blended program completely in-sync with its traditional counterpart, particularly when the latter is constantly evolving.

FAME is focused on very specific goals in order to fundamentally change how educators teach math:

- **Increase** teachers' content knowledge and teaching skills in key pre-algebra, algebra, and transformational geometry concepts, such as proportional reasoning, linear relationships, functions and graphs, and problem solving.
- **Encourage** the use of technology in instruction to support and enhance mathematics teaching and learning (for example Microsoft Excel, Google Spreadsheets, GeoGebra, virtual manipulatives, and other open education resources or OERs).
- **Guide** teachers in making connections between school mathematics, the California Mathematics Standards, the Common Core State Standards, and ELD strategies.
- **Enable** teachers to utilize effective mathematics instructional strategies to meet the needs of all students.



> *The instructors were so helpful with everything: logistics, technology, strategies, and sharing their personal teaching experiences.*
>
> **-FAME 2016 Participant**

FAME 2016 Accomplishments

FAME focuses on deepening teacher knowledge, learning topics in pre-algebra, algebra and transformational geometry, and ways of teaching those most difficult to teach. FAME also addresses teaching skills, teacher beliefs and teacher attitudes. Self-report surveys are used to assess the potential impact of the program on teachers' instructional practices. The chart on the next page illustrates how the teacher-participants assessed their skill levels before and after the Summer Institute in a number of categories. The gains made are impressive in all categories. The categories take into account the broad sets of skills that FAME focuses on—from teaching strategies to the use of technology.

> *Thank you!! What a productive two weeks that will translate into valuable math lessons for my students.*
>
> **-FAME 2016 Participant**

Teacher Self-Reported Effects of 2016 FAME Program: Post-Summer Institute			
	BEFORE	AFTER	INCREASE
I can use a variety of mathematics teaching approaches in a classroom setting.	65%	100%	+35
I can adapt my mathematics instruction based upon what students understand or do not understand.	78%	100%	+22
I know how to use spreadsheet programs (like Excel, Google Sheets) well.	43%	87%	+44
I know how to use spreadsheet software in math instruction.	17%	83%	+66
I am familiar with the virtual math manipulatives available on the Internet.	30%	96%	+66
I know how to use virtual manipulatives in math instruction.	22%	96%	+74
I know how to use dynamic mathematics software programs like GeoGebra.	22%	91%	+69
I know how to use GeoGebra in math instruction.	26%	87%	+61
I feel confident about using technology in math instruction.	48%	100%	+52
I can select effective teaching approaches to address common student misconceptions.	69%	96%	+27

FAME: High Quality Professional Learning

> *"I felt privileged to be part of FAME. I really appreciated the instructors' dedication and how available they were to help. This was a challenging program, but the commitment of the facilitators got me through."*
>
> -FAME 2016 Participant

The FAME participants were asked to rate the FAME Summer Institute on a 1 to 5 scale (1 being the lowest and 5 being the highest) in various categories focused on the overall quality of the program. We are pleased to report that the participants ranked the program high in all five categories, which supports the value teachers find in the program.

87% agreed/strongly agreed that the FAME Summer Institute was well organized.

91% agreed/strongly agreed that the presenters were well prepared.

91% agreed/strongly agreed that the Summer Institute provided them with high quality professional learning experiences.

87% agreed/strongly agreed that they would recommend the FAME Summer Institute to others.

96% agreed/strongly agreed that the content presented was valuable to them.

The KCI's goal in aligning the two programs as closely as possible was to determine the efficacy of the new blended program in comparison to the traditional program. While the curriculum differed somewhat, the evaluation tools for both programs were the same. We are pleased to report that the feedback on the quality of Blended FAME was just as positive, with some survey items actually receiving higher ratings than Traditional FAME. The difference, however, is not statistically significant. A number of the blended participants commented that they appreciated the flexibility of the online part of the program. What is clear is that the KCI has two strong FAME programs going forward. Blended FAME and Traditional FAME provide teachers with a much needed choice in how they acquire improved math and technology skills.

Reaching More Educators— Tailored Professional Learning Programs for Schools & Districts

In 2015-16, nine districts in Santa Clara and San Mateo counties engaged the KCI to conduct tailored professional learning programs. Each district invested in a Mini MERIT for their teachers to develop technology integration skills and student-centered learning strategies.

During the 2015-16 academic year, more than 300 teachers completed this transformational training in 11 Mini MERITs conducted locally by KCI experts, as well as two conducted in Hawaii. Tailored programs that focus on meeting a district's specific strategic goals for professional learning, Mini MERITs ultimately help educators deepen their technology skills and, more importantly, gain the confidence to implement new technology and projects for their students.

> *"THIS WAS AWESOME! I came home totally excited and exhausted from all the intense thinking. I can only hope my kids are this excited at the end of the school day!"*
>
> **-Mini MERIT 2016 Participant**

About Mini MERIT

Like the MERIT program, the Mini MERIT focuses on developing teachers' confidence and teaching skills. Collaboration, critical thinking, problem solving, and creativity are supported by tech tools and apps that increase teacher and student productivity and engagement. Both programs feature instructors who are experienced using technology in their classrooms. Each Mini MERIT is funded by the school or district, which provides the KCI with revenue to support new program development.

The KCI routinely surveys program participants in order to continually improve its program offerings. More than 93% of this year's participants agreed that the Mini MERIT experience helped them learn how to better teach with technology, and 93% agreed that the program increased their confidence in using technology with their students.

Teachers were also asked about their satisfaction level and whether the Mini MERIT prepared them to integrate a variety of educational technologies into their learning environment to enhance student engagement: 97% were satisfied or very satisfied. The program is also meeting teachers' professional learning needs: over 90% expressed satisfaction with the program.

"Thank you so much for the opportunity to learn and play with tech tools and new ideas and ways of thinking. I will definitely use these in my class this year!"

-Mini MERIT 2016 Participant

As a result of the Mini MERIT:

97% learned about educational technology tools they can use in their classrooms.

97% learned how to integrate a variety of educational technologies into their learning environment to enhance student engagement.

91% learned how to select and use appropriate educational technology tools for student projects and teaching methods that enhance learning outcomes and teaching practice.

93% stated that the program helped them learn how to teach with technology.

94% stated that the program increased their confidence in using educational technology with their students.

90% learned how to create technology-enriched, student-centered learning projects that differentiate instruction.

"I loved it and feel a hundred times more empowered to approach the use of tech tools in my classroom. The hard work and organization of the whole week was obvious and I'm extremely appreciative of the instructors and my district for letting me participate."

-Mini MERIT 2016 Participant

Looking to the Future of the KCI: New Programs Launched in 2015-16

New challenges are facing K–12 education in California, whether it is the new California State Standards in Science or the high interest in including Computer Science as part of the K–12 curriculum. These trends have presented new program opportunities for the KCI to explore, develop and launch. Two new program initiatives were launched in 2015-16: MADE Science and the Computer Science Program.

MADE Science Program

Just as school districts grappled with adopting the Common Core State Standards for math, they now face another implementation challenge with the Next Generation Science Standards (NGSS), which will fundamentally change how science is taught.

In partnership with the San Mateo County Office of Education, the KCI launched the first, five-day MADE Science Program this summer. MADE—which stands for modeling, analysis, design and engineering—will help teachers implement the new NGSS standards, while simultaneously infusing technology to provide a deeper understanding of the concepts being taught. The program is comprised of 30 hours of in-person training and provides ample time for practice and discussion.

Designed to provide a project-based approach to science education, MADE encourages students to experience science first-hand, allowing them to apply science concepts in other learning activities, which supports an integrated approach to education. Participants were introduced to the design thinking (DT) methodology, and each day MADE started with a DT challenge that combined simple materials with creative collaboration. As a result, many of the teachers plan to use these design activities in their classrooms. Participants were also able to try out easy-to-use technology tools.

The pilot MADE cohort (16 teachers) responded enthusiastically to the program. They strongly agreed that the topics covered are vital to their success in the classroom. In the spirit of Silicon Valley, the KCI is using the initial rollout of MADE to beta-test and identify real-time improvements to the program. The overarching goal of the MADE Program is for students to better understand scientific concepts, and, in turn, share their work through blogs, portfolios and other digitally published media. This will provide students with an authentic audience and real-world feedback.

Computer Science Program

> *"I LOVED this workshop—it gave me such a good overview of the big concepts but we still got hands-on coding practice. It gave me so many specific curriculum ideas including online coding activities, offline activities, and robotics activities."*
>
> **-CS Program 2016 Participant**

According to CODE.org, nine of ten parents surveyed want their children to study computer science, yet only one in four schools offers students computer programming classes. In California, only 357 high schools offer AP computer science courses. Not only is it imperative to offer high school students computer science courses, but elementary and middle school students also need to be introduced to computer classes to broaden their education and pique what may become a career interest in computer science.

To address this critical need, the KCI has partnered with Google and the Industry Initiative for Science & Mathematics Education (IISME) and launched a new computer science program that trains K–12 teachers in how to integrate computer science topics into their curricula, regardless of the academic discipline.

IISME teachers participated in the KCI's inaugural computer science professional development program during Spring 2015. Sponsored by Google, the program consisted of 24 hours of professional learning for teachers who want to integrate computational thinking, computer science, and coding into their curricula.

The KCI presented three, one-day computational thinking workshops to more than 50 IISME teachers last spring. Each workshop focused on effective problem-solving strategies, and provided participants with the unique opportunity to help develop the program's second component—a three-day computer science workshop.

Teachers' enthusiasm for the new program was high, and more than 35 educators were introduced to numerous computer science topics. Teachers also had the opportunity to developed confidence in their own coding skills during two sessions of the hands-on computer science workshop. Additionally, participants learned about the content and pedagogy that's required to bring meaningful computer science lessons to their classrooms. Using tools like MIT's Scratch and Starlogo Nova, the teachers worked on projects that integrate computer science concepts into existing K–12 math, science, art, history and language arts curricula. At the end of the program, 94% of the participants felt more prepared to teach a computer science-related lesson in their classrooms, and 100% would recommend the KCI's computer science workshop to their teaching colleagues.

> *"This was a great professional development session. Lots of information, resources, applications and interdisciplinary aspects were covered."*
>
> **-CS Program 2016 Participant**

Spotlight on the KCI

Besides offering excellent programs for educators and school districts, the KCI is a leader in recognizing innovative teachers. We also have our own staff members making important contributions to education. Careful management of the KCI operations helps us to sustain our excellent programs.

Recognition of Innovative Teachers: Making a Difference in Their Communities

The KCI takes pride in our program graduates and the work they continue to do in their schools, districts, and communities. Our graduates report that their careers often take trajectories that they couldn't have anticipated as a result of the work they have done here at the KCI with their peers.

The Microsoft/KCI Innovation Award honors three exemplary, innovative teacher-student collaborative projects that fully integrate technology and benefit the Silicon Valley educational community. First place was awarded $6,000, second place received $4,000, and third place received $2,000. All three winners were honored at the Award Recognition Event on March 23, 2016.

FIRST PLACE: Summer Art & Design Thinking Camp
(Kim Mesa and Corinne Takara, Alum Rock Educational Foundation)

This project-based camp engages middle school youth in exploring design thinking processes, digital tools, and visual arts. Campers work individually and collaboratively as they use technology in a very engaging, dynamic, and innovative way. Each week has a different theme and the camp day is divided into two parts—focused learning and tinker time.

SECOND PLACE: Science Enrichment and ResearCH—SEARCH Class
(Terry Chou, Joaquin Miller Middle School)

SEARCH was designed to offer students an authentic scientific research experience that is directly driven by student-generated projects. To make the learning of science applicable, each project is developed from a business perspective and all student groups are effectively start-up companies.

THIRD PLACE: BBC Presents
(Stacy Newsom Kerr, Santa Cruz High School)

As part of the tenth grade Industrial Revolution history unit, students created materials to pitch a movie idea to the "British Broadcasting Corp." In collaborative groups they chose topics, created pitch books with historical backgrounds, costume ideas and locations, and then filmed and presented a three-minute period-accurate preview video that explored their topic.

Number of Educators & Students Served

The table below shows the number of educators who participated in the primary KCI programs in 2015-2016 and the number of students these educators could affect in the 2016-2017 school year.

Estimated Number of Students Affected by KCI Teacher Participants		
	Enrollments/Program & Summit Participants	Estimated[1] Number of Students Who Will Be Taught by KCI Teacher Participants in 2016-17
MERIT	49	4,900
FAME	23	3,450
Tailored Programs/New Programs	450	45,000
Summit Attendance	270	27,000
FASTtech class[2] enrollments	914	NA[3]
TOTAL		**80,350**

1. Total estimates for students in U.S. schools who are affected by a program participant-teacher are based on the average number of students taught per teacher by grade levels per year: Elementary K–5 (25), Middle School 6–8 (150), High School 9–12 (150).

2. KCI conducts these short, technology-specific classes covering a broad range of topics for credit at Foothill College.

3. Estimates of students affected by FASTtech classes are unknown because the number of teachers and the grade levels taught are not tracked.

California Public School Districts Represented By Program Participants

The table below shows the California public school districts (organized by county) that were represented by teachers in the MERIT, FAME, and Tailored programs. Five MERIT teachers are from India and five work in private schools, so the total number shown of public school teachers shown is 39. All FAME and Tailored program participants are public school teachers. Additional data on student demographics is presented to show the percentages of underserved students in the district. Districts with 40 percent or more of low-income students are noted in blue.

	MERIT 2016	FAME 2016	Tailored Programs	Percentage of Reported English Learners | Low-Income Families (Source: Ed-Data, 2014-15)
Santa Clara County				
Alum Rock Union	1	-	14	48% | 85%
Campbell Union High	-	-	22	10% | 21%
East Side Union High	-	2	15	20% | 53%
Evergreen Elementary	-	2		23% | 33%
Franklin McKinley	-	3	33	50% | 82%
Gilroy Unified	1	1		29% | 53%
Los Altos Elementary	6	1		12% | 5%
Loma Prieta Joint Union	1	-		5% | 5%
Moreland	1	-	14	28% | 34%
Mountain View-Los Altos	3	1		9% | 20%
Mountain View Whisman	-	2	25	32% | 38%
Oak Grove Elementary	-	2		29% | 44%
Palo Alto Unified	4	2	10	11% | 9%
San Jose Unified	1	2		23% | 43%
Santa Clara Unified	-	-	36	28% | 40%
Saratoga Union	-	-	6	6% | 1%
Union Elementary	3	-	40	12% | 11%
West Valley College	-	-	23	NA
San Mateo County				
Belmont Redwood Shores Elementary			15	9% | 7%
Burlingame	4	-		21% | 12%
Millbrae Elementary	1	1		25% | 22%
Redwood City Elementary	1	-		48% | 51%
San Mateo Union HS	1	1		12% | 20%
San Mateo Foster City	1	-		27% | 30%
Sequoia Union High	1	1		15% | 35%
Other Counties & Private Schools				
Alameda	1			22% | 44%
Contra Costa	4	-		18% | 40%
Diocese of San Jose	3	-		NA
Diocese of San Francisco	2	1		NA
San Francisco	1	-		24% | 62%
Santa Clara	1			24% | 38%
Santa Cruz		1		29% | 53%
Ventura	2			24% | 50%
Total Teachers	44	23	253	

KCI Joins Google for Education Professional Learning Partner Program

Part of KCI's overall mission is to introduce teachers to technology that is low or no cost. This provides them with tools their students can use at school and beyond. Over the past several years, KCI classes and programs have included Google Tools because they are easy to use and freely available to teachers and students. As part of our service to educators, KCI joined the Google for Education Professional Learning Partner Program in 2015. This program allows the KCI to offer teachers, schools, and districts access to services and training programs to help them make better use of Google Apps for Education and other Google Tools.

Google for Education
Partner

As a result, the KCI is offering new services to educators, such as Google for Education Summits, which are large one- to two-day events where teachers learn more about how to best integrate Google Tools and technologies into their classroom. KCI held two, one-day Summits in 2015-16 and over 250 educators attended. The KCI is also authorized to conduct Google Certified Teacher Boot Camps and Google specific tools training, which we've been offering over the last few years. In addition, KCI can provide assistance to schools and districts in setting up their Google Apps for Education domain and work with them to implement Google Apps for Education.

KCI Leadership Highlights

KCI Shines at CUE National Conference in Palm Springs

Every March, 6,000 to 7,000 educators from across California and beyond journey to Palm Springs for the annual Computer Using Educators (CUE) national conference. The CUE conference is the largest and oldest education technology conference in California, and among the largest in the United States. During the three-day event, the KCI team was on-hand to conduct sessions and receive an award.

Gay Krause, KCI founder and Executive Director, was recognized for her contributions to education. She received the Technology in Learning Leadership Award, which recognizes individuals who have had significant, positive impact on technology usage in education. The award also recognizes those whose work has been effective in improving the quality of education and is worthy of being imitated or modeled. Gay's expertise in K–12 education, as well as her vision for the KCI as a leader in teacher professional learning programs, is widely acknowledged, and the award is worthy recognition.

Kyle Brumbaugh, KCI's Professional Learning Network Director and CUE board member, presented a session on developing peer review tools for a smorgasbord of assignments using Google Apps for Education. The KCI was well represented throughout the three-day conference. Many MERIT program graduates take their projects and classroom experience to the CUE conference. For example, this year 12 MERIT and Mini MERIT graduates presented on a variety of topics. Additionally, eight KCI adjunct faculty also presented.

KCI Hires New Teacher in Residence

Elizabeth Brumbaugh has joined the KCI as the new Teacher in Residence. Elizabeth comes to the KCI from the Santa Clara County Office of Education where she served as Manager and Lead Educational Technologist. She has many years of experience as a classroom teacher, K–12 administrator, manager and national presenter at various education, leadership and technology conferences. Elizabeth is an author, multiple award-winner for her educational expertise, Google for Education Certified Innovator, and Common Sense Media Trainer. Elizabeth has worked with the KCI on several programs, and the team is excited about the vast experience she brings to Foothill College.

KCI Receives Award at the California Public Higher Education Collaborative Business Conference

This fall the KCI received an award for efficiency from the three branches of California's higher education system: CSU, CCC and UC. The award recognizes programs, departments, college, districts, foundations and others that demonstrate a focus on efficiency through innovative projects and practices that improve performance, service, and outcomes.

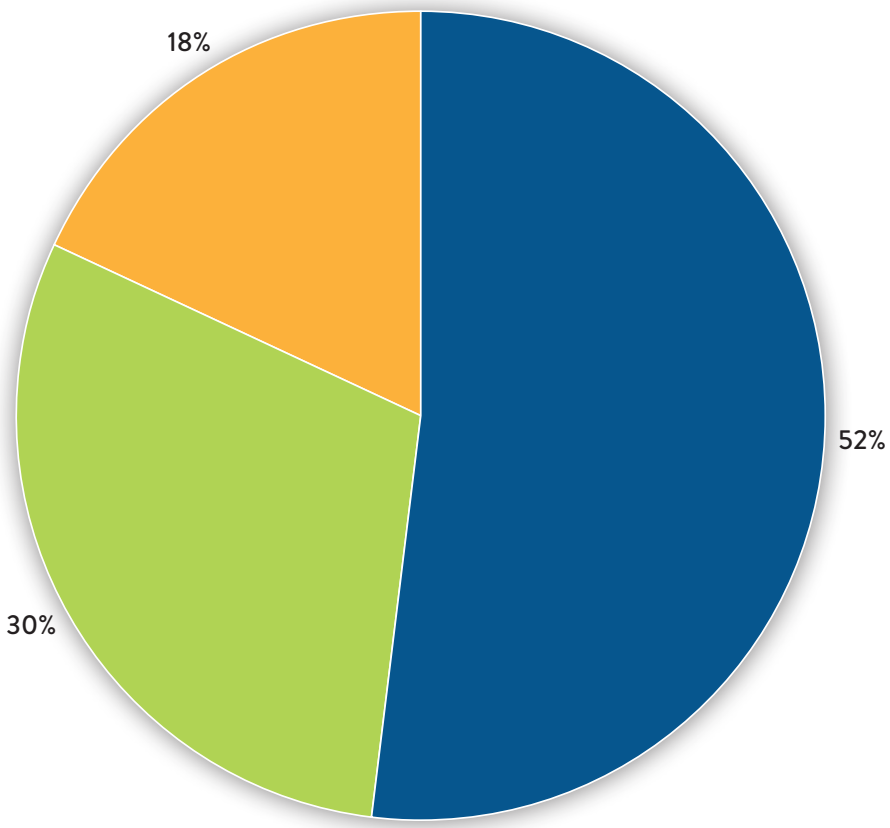
KCI Operations

KCI Financials

Philanthropic contributions account for 52% of the KCI's funding, with 30% coming from Foothill College, primarily in fixed facility support, hardware, software, and two staff positions. In 2015-16 the revenue from KCI services to schools and districts and from Community Education fee-based classes accounts for 18% in revenue. The two charts charts on this page and the next outline the KCI's revenue and expenses.

KCI Funding | Total = $1,371,393

September 2015 - August 2016



$711,562 | **GRANTS & DONATIONS** | Grants are from foundations, which have reporting requirements. Donations do not have reporting requirements.

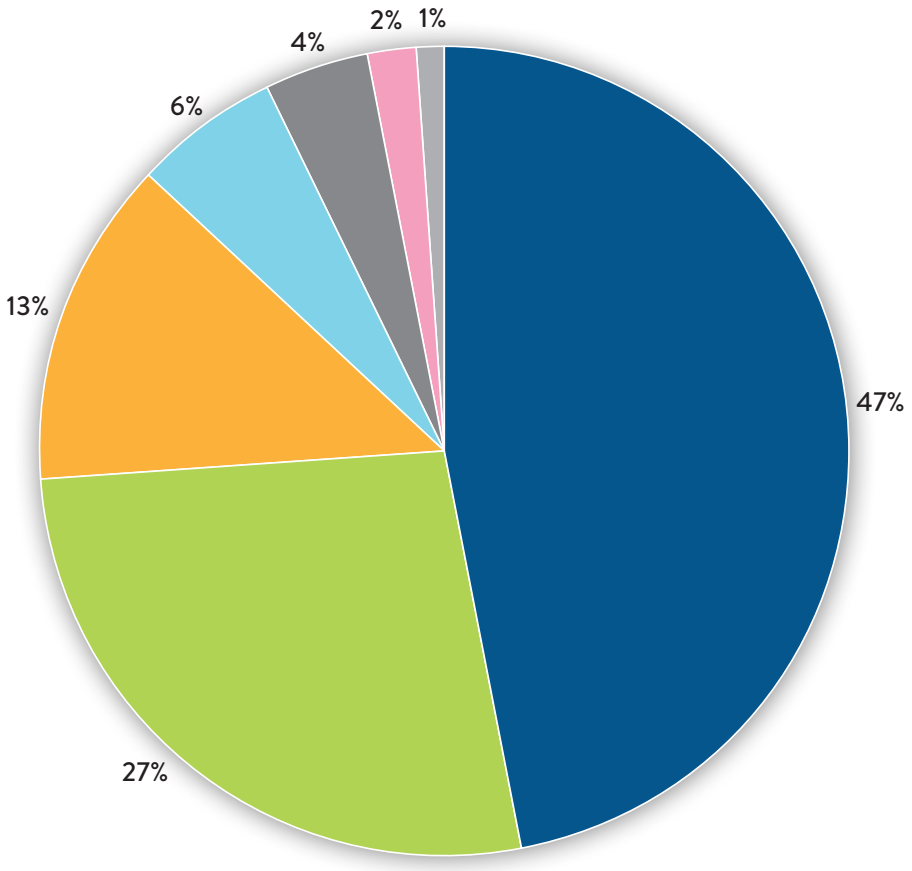
$410,084 | **FOOTHILL COLLEGE** | Funding from Foothill College: Two staff positions, building maintenance, supplies budget, lottery budget for software, Measure C hardware upgrades, and state-supported instructor pay for teaching FASTtech classes.

$249,747 | **SERVICES** | Revenue from KCI services: Tailored Programs and training for schools and districts.

Note: Additional funds are held in the KCI endowment account with the Foothill-De Anza Foundation.

KCI Expenses | Total = $1,334,002

September 2015 - August 2016



$626,574	**STAFFING** includes two positions supported by Foothill College ($128,861) with the remainder ($497,713) for full- and part-time positions covered by grant and donor funding.
$362,825	**INSTRUCTOR PAY, INCLUDING CURRICULUM DEVELOPMENT** for all adjunct KCI faculty involved in MERIT, FAME, Tailored programs, and FASTtech classes.
$167,611	**PROGRAM SUPPORT** for the MERIT and FAME programs including supplies, follow-up sessions, tech tools for participants, food, student interns, and general administrative support.
$87,507	**PROGRAM STIPENDS** paid to MERIT and FAME participants, as well as cost for continuing education units (CEUs) that participants receive as part of the program.
$56,989	**MARKETING** and development activities including the production and distribution of all KCI communications, the development and maintenance of the KCI website, and all grant proposal development work.
$22,611	**HARDWARE & SOFTWARE** purchases and upgrades for the KCI classrooms and multimedia.
$9,886	**SUPPLIES** and materials.

KRAUSE CENTER *for* INNOVATION
FOOTHILL COLLEGE

12345 El Monte Road, Los Altos Hills, CA 94022
(650) 949-7680 | krauseinnovationcenter.org

Contact Us

Gay Krause
Executive Director
krausegay@foothill.edu

Liane Freeman
Director, Strategy & Marketing
freemanliane@foothill.edu

Kyle Brumbaugh
Director, Professional Learning Network
brumbaugha@foothill.edu

Elizabeth Brumbaugh
Teacher in Residence
brumbaughelizabeth@foothill.edu

INNOVATE | EDUCATE | EMPOWER