



THE KRAUSE CENTER FOR INNOVATION AT Foothill College

FOCUS ON EFFICIENCY

The mission of the Krause Center for Innovation (KCI) is to design and implement innovative professional development education and training with an emphasis on technology integration and STEM curriculum, and to support the diverse workforce needed to compete in the knowledge economy.

The KCI has been serving as a regional hub for professional development for K-14 educators since 2000. More than 16,000 teachers have taken KCI programs and courses and the center has built a reputation on intensive summer institutes for educators, as well as the courses it provides throughout the year. The KCI consistently focuses on building innovative courses and programs and on evaluating and improving its technologies.

KCI's key curricula include:

1. MERIT - Making Education Relevant and Interactive through Technology, which supports faculty members as they develop innovative applications of technology in teaching and learning.
2. FAME - The Faculty Academy for Mathematics Excellence, a professional development for teachers of mathematics in grades 6-10.
3. MADE Science, focused on providing training to support the implementation of the Next Gen Science standards.
4. A computer science program to train teachers how to implement computer science in the classroom regardless of content discipline.
5. FASTech, a series of classes that address the California Technology Proficiencies by providing an opportunity to discover ways to incorporate technology into curriculum.

The KCI's other key focus is partnering with education-oriented nonprofits and foundations to serve educators. The KCI has developed a Professional Learning Network Plan that has the potential to train 35,000 teachers a year statewide. Based on its experience and success, the KCI is uniquely positioned to address many of the critical issues facing education and workforce development.

The KCI's experience in educational technology allows the center to provide options for school districts to develop programs tailored to their unique hardware, infrastructure and learning needs.

MILESTONES

The KCI was founded in 1998, with the facility opening in 2000.

2016

- MADE Science program developed and launched.
- More intensive computer science program developed and launched.

2015

- First computer science workshops launched.
- Hybrid FAME program developed and launched.

2014

- Professional Learning Network plan developed to expand reach and to leverage partnerships with other community colleges and county offices of education.

2012

- Tailored professional learning services provided to schools and districts to meet strategic professional development needs.

2010

- The FAME program launched.

2009

- Planning grant received to develop the FAME program.

2003

- FASTech classes were launched.

2001

- KCI offered its first MERIT program, originally called the "Earn While You Learn" program.

OPPORTUNITIES AND SOLUTIONS

The KCI plans to take its Professional Learning Network programs and best practices statewide to provide high-quality professional learning and in-service teaching programs that emphasize the implementation of new and innovative technology resources and strategies. By leveraging its relationships with community colleges and county offices of education, the network will train more than 50,000 teachers in the next five years. When at full capacity, it will train more than 35,000 teachers annually, impacting more than 1.1 million students who will experience deeper, more engaging learning environments and thrive in higher learning and in the 21st century workplace.

QUANTIFICATION AND RESULTS

KCI programs routinely receive high evaluations from educators. More than 95 percent of MERIT program participants agree or strongly agree the program has provided them with the following skills:

The ability to model a 21st century classroom environment that demonstrates critical thinking and problem-solving, communication, collaboration, creativity and innovation;

The capability of integrating innovative technology tools and practices into the learning environment to enhance engagement and learning; and

The expertise necessary to guide development of technology-enriched, student-centered learning projects designed to improve student learning outcomes.

FAME program participants report:

An increase of 60 percent in their confidence level of using technology in math instruction, resulting in a 90 percent confidence level.

A significant 45 percent increase in their ability to use a variety of mathematics teaching approaches, resulting in 99 percent proficiency.

IMPACT AND BENEFITS

Most school districts do not have a trusted resource for professional learning focused on integrating technology to fundamentally change teaching and learning. By establishing the KCI Professional Learning Network, high-quality professional learning programs based on best practices can be deployed across the state. The network will also make it possible for community colleges to form stronger connections with their K-12 feeder districts.

QUALITY, COST, OR DELIVERY

KCI programs are delivered by practicing K-12 educators and provide current best practices for technology integration. By offering these courses through Foothill College, they provide better value and higher quality than professional learning programs delivered by for-profit professional development firms.

PROJECT TEAM

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LESSONS LEARNED

KCI has developed best practices in professional learning over the past 16 years.

- 1 Immersive training allows teachers to learn, explore and plan. It is the most effective method as opposed to short training interventions as documented through a variety of research studies.
- 2 Follow-up sessions support teachers as they implement changes in the classroom.
- 3 Technology integration should occur at the same time as the deployment of technology.
- 4 KCI models 21st century skills so that teachers re-experience learning.
- 5 Teacher transformation requires support through the entire implementation process.

REFERENCES

krauseinnovationcenter.org



Teachers working on developing "Egg Drop" apparatus.



Teachers using an iPhone app to separate light rays.



Looking through a spectrometer to divide light rays.



Using a reflective surface in a parabola to create a solar oven.