

QUEST Science Education Institute 2011-2012

A professional development opportunity for educators designed to support multimedia integration in middle and high school science programs

Apply online at <http://QuestEdInstitute2011.eventbrite.com>

What is QUEST?

QUEST is a science, nature, and environment series produced by KQED Public Media in San Francisco. We produce a weekly half-hour television program, weekly five-minute radio reports, a web series and educational materials all centered on Bay Area science research, events, issues, and people. The education component of QUEST is part of KQED Education, the division of KQED that provides instructional resources and services to the educational community to facilitate learning with public media.

Find out more about QUEST at www.kqed.org/quest

The QUEST Science Education Institute

The QUEST Science Education Institute is KQED Education's year-long professional development program for Bay Area science teachers and educators. During the Institute, we work with **teams** of science educators and leaders to provide training on using QUEST resources and creating science-based multimedia with students to enhance science education. A \$400 stipend is provided for participants.

The QUEST Science Education Institute includes

- training on how to use video and audio as effective teaching tools.
- training on media-making tools, such as Google Maps, iMovie and Movie Maker, and a media-making toolkit for use in science classrooms and programs.
- guidance in designing a multimedia-based project to implement in your science classroom or program.
- support with project implementation.

Overview

- The Institute begins with an introductory webinar and a three-day Training Intensive in July where participants will learn new media skills and begin development of a project that they will implement in their science classroom or program.
- Monthly follow-up workshops throughout the first half of the school year offer participants additional training and project planning time.
- Multimedia projects are implemented during the second half of the Institute with remote support from QUEST Education staff.
- The Institute wraps-up at the close of the school year with a special event to share projects and successes.
- Participants continue to receive support, as needed, from QUEST Education staff.

The Team Approach

The QUEST Education team is committed to your success. We want you to be confident in your new skills, challenged to try new ideas and projects, and supported along the way. Keeping this in mind, we are seeking **teams of science educators and leaders** to participate in the Institute.

Designing Your Team

During the Institute, you will be working collaboratively with your team. Together, you will learn about multimedia tools, decide how you can best apply them to your science programs and design projects to use with your students.

Please think about the following when designing your team:

- Each team must have 4–7 members.
- Team members must work with middle or high school students or programs. Teams may include a combination of science teachers, informal science educators or program directors, district science or technology coordinators, school science department chairs or leaders, and district or school librarians.
- Each team must have a **team leader**. This person will be responsible for filling out the Institute application, organizing and holding team meetings, completing required Institute documents (e.g. team goals, project outline, etc.) and will be the main point person for team communications. Team leaders will receive an additional \$100 stipend.
- Teams must have classrooms/facilities equipped with a projector and multiple computers with high speed internet access, and have the support of the technology director of your school, district or organization.
- **All** team members must possess a strong desire to integrate new media tools into science programs and be comfortable using computers and technology. (Please see our Computer Skills Checklist found on p. 4.)

Ideas for Institute Teams

- Same-subject high school teachers in one district
- All of the science teachers from a middle or high school
- Afterschool science program educators and directors
- Two school-based science teachers and two informal educators from a museum, aquarium or environmental education organization
- Middle school science teachers, the school librarian and the district curriculum chair
- Cross-curricular teachers from a science or environment-based academy
- Instructors and coordinators from a science summer camp

The possibilities are endless!

Institute Requirements

Full team participation is required in the QUEST Science Education Institute in order for members to receive the complete Institute stipend. Every member is expected to

- participate in an introductory webinar and attend the three-day Training Intensive in July.
- create and document project goals and an implementation plan.
- attend at least two of the four follow-up workshops.
- implement a project (designed by you and your team) in the spring or summer of 2012.
- share ideas with Institute participants through the use of online tools.
- participate in a site-based visit from the QUEST Education team.
- attend a mid-year gathering of all Institute teams.
- participate in the celebration and project-sharing event at the completion of the Institute.
- be willing to participate in program evaluation activities (e.g. online surveys, collect student feedback).

Perks for Team Members

Each team member will receive

- a \$400 stipend—\$200 after attending the summer Training Intensive and \$200 after completing the Institute requirements. Team leaders receive an additional \$100 stipend.
- a site visit (one per team) to assist in project planning or implementation.
- ongoing remote support from QUEST Education.
- follow-up training and workshops (see Institute Timeline).
- access to KQED Education’s equipment loan library, containing laptops and Flip video cameras.
- opportunities for creating content for the QUEST website.

Teams will also have an opportunity to take a leadership role in using the best of PBS science media with students through PBS Education’s new digital media service.

Multimedia Projects

During the Institute, participants will use QUEST content as a model to develop and implement a multimedia project—either separately or as a team. Project development will take place during the fall, with project implementation occurring in the spring or summer.

Sample Multimedia Projects from Past Institutes

- An online map demonstrating physics concepts in action in your neighborhood
- A narrated slideshow explaining an historic earthquake
- An online map showing the diversity of species in riparian habitats
- A video about designing an experiment and the scientific method
- A video about the properties of an element

Computer Skills Checklist

The QUEST Education staff wants teams to benefit as much as possible from their participation in the Institute. For this reason, Institute applicants should already know how to do the following:

- Save, copy or move files to a variety of drives (hard drives, CDs, USB drives)
- Save files as a new format and understand when and why to do so
- Determine the amount of space a file occupies
- Create, rename and delete folders
- Cut, copy and paste text and graphics from one application to another
- Play audio and video in a multimedia player
- Save images from a webpage
- Download files (documents, images or videos) from a website
- Upload files (documents, images or videos) to a website
- Download and save photos from a digital camera
- Use basic photo editing software to edit photos (i.e. crop, correct brightness)
- Scan and save documents as images

Applying for the Institute

Are you ready to apply?

Team leaders can apply online at <http://QuestEdInstitute2011.eventbrite.com>

Please have the following information ready:

- Your contact information
- The names, titles and email addresses of your team members
- Answers to the following questions
 - How do the goals of this Institute (media and technology integration in middle and high school science programs) align with the goals and/or mission of your district, school or organization? (150-300 words)
 - Why is your proposed team the best group of individuals from your particular site(s) to participate in the Institute? (100-200 words)
 - What structures do you already have in place that will support your team in implementing new QUEST multimedia and technology skills? How does your team plan to share your new knowledge with colleagues? (100-200 words)
 - What technology do you have access to at your school or site that will support your work (e.g. computer lab, classroom computers, digital/video cameras, etc.)?
 - In what ways do you see new media tools valuable for learning science? (100-200 words)
 - What are members of your team currently doing with multimedia and media making tools? What would you like to be doing?

The application deadline is Friday, May 27.

Questions?

Please contact Andrea Swensrud at (415) 553-2311 or ScienceEd@kqed.org

Institute Timeline and Details

Three-Day Training Intensive

July 29-31 at KQED

The three-day Training Intensive is your team's launch point for learning about QUEST resources and content. It is composed of mini-workshops, hands-on projects, and team planning. Each team will set goals and begin to develop their multimedia project. (Prior to this, team members will have participated in introductory webinars held during various dates and times.)

Team Meetings

One every other month beginning in August

In order to take advantage of the momentum gathered during the Training Intensive, each team will meet within one month after the Training Intensive. This meeting is not facilitated by QUEST, but is an important part of the Training Intensive. Each team will then meet at least once every other month in order to develop projects, update implementation plans and provide each other with support. These meetings may take place during time provided at the monthly QUEST follow-up trainings and workshops.

QUEST Education Visit at Your Site

September through April – your choice!

This site visit is your team's personal support from QUEST Education for implementing your project.

Follow-Up Trainings and Workshops

One per month through January – dates and locations TBD

These four-hour workshops, led by KQED Education staff, will be offered monthly on Saturdays through January. The workshops will provide additional training on the tools covered during the summer training intensive as well as time to practice skills. (Practice time during the workshops may alternatively be used as meeting and project development time for teams.)

Mid-Year Sharing Gathering

January – date and location TBD

This event is designed to bring Institute participants together to reconnect, update each other on progress made, and eat good food! Each team will give a short presentation to colleagues about the multimedia projects that will be completed during the second half of the year.

End of Year Celebration

May – date and location TBD

Celebrate the conclusion of the Institute and share your team's successes with the QUEST Education Institute community!