

**Tri-Valley Educational Collaborative  
General Meeting  
January 7, 2010- 8:00 AM to 10:00 AM  
LVJUSD Board Room**

**MINUTES**

***Members Present:*** Kathy Adelman, Cindy Alba, Jacque Barker, Denise Boeder, Bill Branca, Candy Brown, Jim Caldwell, E. Calhoun, Amanda Carlson, Diane Centoni, Tom Curl, Bryce Custodio, Don Danner, Gloria Da Silva, Julie Duncan, Deborah Evans, Ben Fobert, Jim Freeland, Holly Galloway, Shay Galletti, Gina Gourley, Linda Gullick, Susan Hayes, Kim Halket, Todd Halvorson, Debbie Harvey, Nadine Horner, Jorja Ivie, Karen Jeffries, Kit Little, Mark McCoy, Keri McDonald, Ginny McGaha, Karen McMahan, Stephanie Mainoni, Steve Martin, M. Mendiola, Bob Middleton, Lisa Pong, Jennifer Rousch, Vicky Schellenberger, Greg Schroeder, Kathy Schultz, Rita Smith, Charlene Walker, Judi Watkins, Anne White, Catherine Wolfe, Ed Woolworth, Kelly Zummo, Nancy Wright.

***Special Guests:*** Molly Dougan, (LLNL) Darlene Besst, Noreen Bastian (TVROP)

**I. Call to Order**

The meeting was called to order at 8:03 AM and introductions were made by Diane Centoni.

**II. Minutes**

The minutes of the December 3, 2009 meeting were presented and reviewed. Ben Fobert moved to accept the minutes as presented. Jorja Ivie seconded the motion and it passed.

**III. Website Task Force Update**

Ben Fobert reported that the website task force met before the holidays with the Web Master for LPC to talk about a comprehensive ‘people-oriented design’ scheme for the website to make it more user friendly. Upgrades include updated graphics, functionality and color scheme. Content is continuing to be updated and aligned with the new format. A new student-designed logo will be part of the launch in spring.

Additionally, the administrative council approved a “TEC logo contest” open to all students in the member districts. Flyers went out to relevant instructors prior to the holiday break. The deadline for submitting designs to the website task force members is January 25. The task force will meet on Jan. 28 to narrow down the field to 5 logo options. The 5 finalist logos will be presented – anonymously- at the TEC February meeting for a vote of the membership. The winning designer will win \$100, to be presented at the March 2010 membership meeting.

### **III. Announcements**

There were no announcements.

### **IV. Presentation: Career Opportunities at Lawrence Livermore National Laboratory- Recruiting & Employment**

Presenter: Molly Dougan, Recruitment, Diversity, Scholar and Start Programs Group Leader for the Strategic Human Resources Management Directorate at LLNL

Molly is a third generation Livermore resident. She has worked at LLNL since 1987 and previously worked for CSU Long Beach and CSU Sacramento. Her area of expertise is human resources- recruiting experience, employment, and scholar employment program. She is currently a group leader in HR.

Personal story:

Ms. Dougan thanked TEC members for counseling students towards careers. Her family did the same for her. Her grandparents homesteaded in the area- they encouraged their boys to pursue agriculture and girls to pursue business. They wanted them to have at least a high school education. Her parents emphasized the importance of having a skill whether through college or trade school or some other means. She also discussed the fact that college isn't for everyone.

Ms. Dougan's daughter took the life skills class at Granada High where students focus on what kind of life they want and the careers that will help them get there. This directed her into early childhood education. She attended LPC for junior college, then transferred to Sacramento State, where she graduated and obtained her teaching credential. Without those programs, she wouldn't be as successful as she is.

LLNL- The lab has four main mission areas. Part of the mission is to ensure safety, security and reliability of the US nuclear stockpile as a deterrent and they need to verify to Congress that the nuclear stockpile is safe and reliable. They send staff to other countries, such as Russia, to teach warhead dismantling. They detect and monitor threats. Enhance energy and environmental security of our nation. LLNL has always been in the energy business and are working to develop 'fusion' technology as a less expensive energy source for the nation.

WORKFORCE BREAKDOWN- To maintain an economically competitive position in a global world, LLNL needs a broad range of disciplines to meet workforce needs. They had 6000 employees over the past few years from scientists, engineers, technical, administrative, facilities and trades. LLNL is like a 'small city.'

Employee discipline percentages (from slide):

Scientists & Engineers	44.5%
Technicians, non-exempt	13.0%

Admin/Mgmt	11.7%
Technicians-exempt	10.8%
Admin/non-exempt	7.6%
Supplemental labor	7.3%
Protective Force	3.8%
Trade & Laborers	3.7%
Students & Scholars	3.5%
<u>Metals Fabric/Machinists</u>	<u>1.4%</u>

**SKILLSET REQUIREMENTS:** LLNL looks for broad knowledge and sound depth in an area of expertise. For machinists, examples of skills they look for include fabrication skills, small precision engineering and large machines. Those are unique skills. They also need the ‘soft skills’ communication and interpersonal skills: they have to be able to communicate clearly. This is particularly important for scientists as they need to defend their approach/debate a scientific problem. Also need to be able to convince peers and bosses of your position.

Employees need to be able to work in teams. Team-based working is what the lab is known for. Cross-functional teams work on projects and that takes a certain set of skills where people who have different approaches can work together. Also important to have the ability to problem-solve and think ‘out of box.’ Teaching those soft skills in addition to trade/technical skills must be done through their education if they aren’t intrinsic.

**WORKFORCE NEEDS-** LLNL’s workforce needs are driven by the ever-changing national security mission. Historically, people worked on large projects for their lifetime, or throughout a 30-year career. Now it’s different. There are a few large projects, but primarily people work on small short-term projects.

LLNL also engages in industrial partnerships, for instance with the bioscience program at the U.C. Davis Cancer Center where they are working on better ways to provide targeted radiation doses to patients, sending isotopes directly to the site. They are also evaluating photon rather than radiation to pinpoint and protect other organs in patients. LLNL was also involved in the Human Genome Project- sequencing and mapping of the genetic code- a lot of that work has moved into the Joint Genome Institute in Walnut Creek. We partner with other labs and the Department of Energy. To “do” science, you have to be collaborative.

**HOW TO GET A JOB AT LLNL-** The only way to apply for a job is to find online at their job opportunities site. Applicants create an account and profile. Many jobs require US citizenship (primarily) and advanced degrees. Hiring managers review resumes for required skills, knowledge and abilities. Prospective applicants are identified and interviewed. Final selection is made after a thorough background investigation. To be an applicant you need to apply for specific job and keep applying for jobs, not kept on hand. Important terminology: “Exempt”- salaried, monthly; “Non-exempt”- hourly, overtime.

## INTERNSHIPS-

1- College-level students can apply for internships through the Scholar Employment Program. These are paid summer internships and the ideal time to do this is now- before the end of the month. Encourage pre-grads to do this. Those who have had internships are most competitive for permanent hire. Science-related internships are primary. It is rare to hire high school students at this level although exceptions are made for bright, talented high school students on occasion. College students interested in internships should apply on the website. They are listed in the job opportunities.

2- Junior college and college-level students can apply for the Academic Co-op Program, which provides non-paid internships.

3- K-12 teachers- internships expose them to the work done at the lab. They also co-develop science education curriculum through the K-12 STEM program, which Dick Farnsworth administers through the lab. Ms. Dougan stated she would like to see this grow.

Hiring through Recruitment Agencies- The lab's supplemental labor vendor is IAP. Ms. Dougan encourages entry level people to go with a vendor. She was hired through a vendor when she couldn't get hired directly. Chance to obtain experience in a lab environment, even if it isn't at LLNL. The lab is a 'different' place to work- its culture is research and development.

Nancy Wright noted that she used to do presentations at the lab's career center. Now there is a staff that supports career development and they do internal workshops for employees in the HR dept.

Nadine Horner noted that the Livermore Public Library is another outside resource for career services. She also said the lab received a grant this year for a dedicated staff person to assist in looking for jobs and updating resumes. Employees are always looking for volunteer opportunities through our "news online" communication- so a way to connect with the lab is to send volunteer workforce requests to the lab for lab employees to consider.

**WORKFORCE CHALLENGES-** The lab has an aging workforce. In the next 5 years, a large number of employees will be eligible for retirement, possibly as high as 40% are expected to retire. HR needs to double our efforts to recruit and hire the "next generation" of skilled staff and leaders. Unfortunately, right now demand exceeds supply and this will get worse. The qualified applicant pool is shrinking because fewer US citizens are graduating in the science and engineering field. Also, the skilled labor pool is drying up despite programs. Competition for talent is fierce between national labs and private industry across the nation and even outside of the US borders for skilled talent. Our location near the Silicon Valley makes it even harder. Fortunately, the high tech community in the Bay Area pays premium wages. One discipline that has remained strong is in the IT area, where there is a high demand for staff.

WORKFORCE NEEDS- Employees with transferrable skills. They have to be able to learn other discipline areas. LLNL is looking to 're-employ' their employees. They are providing continuing education opportunities and training in new skills areas to employ existing personnel in areas they need to move them into. All this is done on smaller budgets, smaller projects and moving staff a lot more. Primarily, employees need to be able to adapt and be flexible.

LLNL and EDUCATION- We need to work together to partner to meet skilled labor needs. Things change fast- the lab needs to make sure they don't become obsolete. Students need to keep skills current. Want to determine how to help kids find footholds in science earlier- through continuous learning, apprenticeship programs, skilled admin and operations staff are critical.

COMPUTER SKILLS- The Department of Energy's ASCI- large computers program is still in existence. They still have the largest super computer. Reduction of stockpile meant we moved from live experiments to computerized modeling. Codes are huge and run in seconds, whereas just a decade ago they were running over the course of days. They've also advanced to 3D modeling.

MACHINISTS- there is an ongoing need for machinists. This is a trade level with minimum education level. No required degree, but have to have a high school diploma or GED and some experience. Sheet metal and fabrication classes are ideal job preparation. A lot of high schools in the Midwest have great ROP instructional development in that area.

There is an apprenticeship program and the 3-hour assessment following successful completion of the 'work keys' program offered in the secondary districts was one of the filters. The region has things in place to provide foundations for employment at LLNL including grants, the TVROP Get Set program, alternative energy program and developing engineering programs at Livermore High.

#### **IV. District Team Breakouts**

The meeting adjourned at 10 am.

Respectfully Submitted,

Susan Hayes