

**Tri-Valley Educational Collaborative
General Meeting
December 3, 2009- 8:00 AM to 10:00 AM
LVJUSD Board Room**

MINUTES

Members Present: Cindy Alba, Denise Boeder, Liz Buckley, E. Calhoon, Diane Centoni, Tom Curl, Linda Gullick, Bryce Custodio, Candace Brown, Don Danner, Moses de los Reyes, Gloria DaSilva, Sue Davis, Julie Duncan, Deborah Evans, Susan Hayes, Ben Fobert, Jim Freeland, Kim Halket, Debbie Harvey, Robbie Kreitz, Kit Little, Mark McCoy, Keri McDonald, Karen McMahon, Stephanie Mainoni, Steven Martin, Bob Middleton, Janice Noble, Cheri Clasen, Vicky Shellenberger, Stacey Stein, David Stronck, Ellen Turner, Charlene Walker, Catherine Wolfe, Kelly Zummo, Amanda Carlson, Lisa Pong, Greg Schroeder, Shay Galletti, Scott Miner, Ed Woolworth, Gina Gourley.

Special Guest: New Member Cheri Clasen, *Office of Congressman Jerry McNerney*; Kelly Bowers *Assistant Superintendent LVJUSD*; Suzanne Wallace, *Tri-Valley Community Foundation*; Kim McNeely, *Director of Facilities, DUSD*; Pam Williams and Jena Megalizzi, *science teachers at DUSD*.

I. Call to Order at 8:00 AM and Introductions by Dr. Janice Noble

The meeting was brought to order by Dr. Noble at 8:03 AM.

II. Announcements

Alameda County- Moses de los Reyes shared important information from the Alameda County Social Services Agency. They have sent a letter to all business owners encouraging them to hire “people at risk.” The salaries and benefits for those who are hired are reimbursed up to 80 percent for 6 months. He reports that many of their contractors are very interested in this and says it is an opportunity for students and families. Moses says the county has projects and contracts for construction and clerical positions- there is work for them to do.

Cal State University East Bay – Dr. Stronck reported on a recent article published that has an impact on science and math students. It is well known that there are high levels of high achievement in schools in Japan and not in the US or Germany. While there has been great interest in duplicating the Japanese, a new study says that’s not the way to go. The common factor for high achievement is to be focused on high-order thinking. Challenge students to struggle with recognizing relationships. The worst thing you can do is allow your curriculum to become a mile wide and only an inch deep. By teaching to tests and with superficial coverage of subjects, we have a disaster on our hands.

TVROP- Diane Centoni- Diane reported on a conference for “Project Lead the Way” which has been of interest with engineering academies. The conference is Dec. 14 and the deadline to rsvp is Dec. 7. The program is free and worthwhile if you’re looking at that pathway. The staff at TVROP is currently at a “Tools for Change” conference for career planning for students in non-traditional careers and special populations.

LPC- The “Shifting Gears for Senior Parents” program is tonight at 7 PM at LPC.

Cheri Clasen- The deadline to send holiday cards to our troops serving overseas through Congressman McNerney’s office was yesterday however the office will also be sending them to military hospitals on US soil. If your students would like to create holiday cards for the troops, contact Cheri at Cheri.Clasen@mail.house.gov.

III. Approval of Nov. Minutes:

Diane recommended these names be moved from “Guest” to “Member” in the November minutes: Lisa Pong, Greg Schroeder, Amanda Carlson, and Gina Gourley.

Bryce moved to accept the minutes with corrections. Bob Middleton seconded the motion and it passed.

IV. Presentation: “Down the Pipeline: Leading Students to Tri-Valley Energy Careers” with Jim Caldwell

There are many “green jobs” installing solar panels, utility line workers; nanotechnology scientists. A market survey and research report on the east bay job outlook can be accessed on Jim’s website: www.workforceincubator.org. Five cities in the Tri-Valley funded the study. The focus was on forecasting career opportunities and job growth and identifying active job sectors in the Tri-Valley.

Green Energy Jobs

Energy Source Specialties

By 2020, 20- 30% of energy should come from renewable sources, therefore job growth in this area has to happen (including solar, hydro, wind, biomass).

Energy Efficiency

There are also career opportunities in “energy efficiency.” Residential (uses 11%) and commercial (9%) Industrial uses 24% of energy and transportation uses 28%. There are also job opportunities in electricity generation.

Smart Grid

45 Billion dollars of stimulus money has been dedicated for developing a “smart grid.” Technology in the current grid is 50 yrs old. John Chambers, CEO of Cisco, recently stated that the smart grid will be times bigger than the Internet. We need to install a highly secure, private internet system to control the electric grid. To do so, we will need power engineers, graduates of Cisco Academies, IT specialists. Over the next 10 years, California utilities will invest 30 billion dollars into developing the Smart Grid. Another opportunity for jobs in this sector is the expected retirement of 40% of utilities workers over the next 5 years. 30,000 jobs could be created. Many may leave because they don’t want to learn required new skills- it is quite a transition going from electricity to electromagnetic equipment. State-wide there are three grants for Dept. of Energy funding for programs that Jim helped write. There needs to be a pipeline through high schools. A few programs in existence include PGE’s “power pathways” program- it’s a trade school for utility workforce.

Transportation

LLNL and Sandia teamed up to create innovation around advanced transportation technology and are looking at workforce required- what it will look like and where they’ll come from.

Sustainability Services

Includes retrofit jobs and possibly consulting services like recycling and waste management.

Educational requirements for many green job titles are:

- Bachelors degree or higher- 62% of titles
- AS degree or equivalent- required for 9% of titles
- Apprenticeship or trade school- required by 11% of job titles
- High school diploma or GED required for 18%

Top professional careers

70 % of Green companies are small with fewer than 20 people. The largest is a consulting practice in Walnut Creek with 190 people. Only 6 companies are over 100. Green Industry sub segments include contractors, environmental engineering, renewable energy, solar energy, environmental consulting, recycling waste systems, and biofuels.

Top “Green Collar” careers

Contractors, low carbon energy solar, transportation products and systems, low carbon energy biomass, environ consulting, biofuels. Typical titles include “technician, operator or installer.” Of job titles for green collar jobs, 14 titles require an A.S. or trade school equivalent; 19 require apprenticeship level; 33 require high school or GED.

East Bay “Green Economy”

The Tri-Valley is a “high-tech” and “high intellect” region. Job titles in the green economy are still being developed but in related jobs there are currently 729 people working in efficiency systems (HVAC, manufacturing and installation); 642 jobs in low carbon renewables; 429 employees in green building (contract labor that isn’t reflected in this number) and 427 in transportation (this sector will grow). The Tri-Valley was underperforming in green economy in 2008. There were just 10 “green” companies with 382 employees. The Tri-Valley though is part of the “Green Corridor” that includes Berkeley, Oakland, Richmond, and El Cerrito. However, with the largest per capita concentration of PhDs in Livermore than anywhere in the US, two national labs, home to corporate headquarters of Chevron and high performing school districts, we are a “sweet spot” in the East Bay green corridor.

Workforce Incubator is the workforce development hub for this effort. If you look at Career Ladders- the job opportunities in the Tri-Valley will be in: biofuels, combustion science, environmental engineering, environmental consulting, energy efficiency, smart grid, transportation, and energy storage. Product and service being developed here for the global green energy market, which is valued at 1.3 trillion dollars. This is the kind of need that started the Silicon Valley. We can market this to markets around the world.

Cheri Clasen noted that Congressman McNerney was a wind engineer and moved to the Tri-Valley to work at Sandia. The frustrations he has are that for the science and technology he was instrumental in developing in the 1980s- those jobs are now in Spain and Germany. He is our only energy scientist in Congress.

Pathways to Professions:

Attaining a degree that already exists with an emphasis area on the specific green job area of study you are interested in. Fortunately, the basic degrees are already there, including electrical engineering, mechanical, chemistry/chemical engineering; civil engineering, environmental science, geology, environ studies, construction mgmt.

Pathways Mapping from Secondary Schools upwards- good structure already

Middle schools already teach awareness of energy and environment through STEM education;

High schools- explore renewable sustainable technical curriculum and advanced STEM education and college prep. The interest in Dublin is high- TVROP is growing and Diane Centoni reports there is grant funding for water management in renewable energy curriculum.

Chabot/DVDC/LPC- Green Collar Certification Programs- Associates degree or Professional Certification- Engineering and IGETC (series of courses for energy studies that transfers as part of general education transfer program accepted at UCs and CSUs. UC Berkeley has Institute of Environment; UC Davis has Energy Institute

Kelly Bowers reported that East Avenue Middle School’s energy science class has been filled every year, so interest at the pre-secondary level is high.

Current Career Pathway Development: Creating pathways may be simple if we build on existing pathways and add the green energy component. At LPC we have all courses for hydrology transfer curriculum, but they not sequenced or marketed that way. It will be clear soon what that pathway looks like. Need to focus and emphasize and market them in certain way. Courses at other surrounding community colleges include Los Rios Community College; 30 energy courses at DeAnza; Evergreen has building engineering modeling workforce institute; Diablo Valley College has solar and solar thermal curriculum; Laney College has an HVAC specialty.

V. Website Task Force Update- Ben Fobert

The task force has been working to ensure information is accessible to all kinds of users, they are working on verbage and design and are moving forward on schedule. When you visit the website, you'll know where to go if you're a parent, student or employer. The final product should be more streamlined. We meet with the LPC Webmaster next week and the bulk of the work should be done after this next meeting.

VI. Pathway Project Update- District Road Show- Bryce Custodio

The team did their first presentation for Dublin High School at a staff meeting. Bill Branca led the show and worked with Kim Halket. It went very well and staff was receptive and inquisitive about it. It was interesting to see how many weren't aware of the pathways we have. We put some of the binder pages together so they could see what we were doing. After the meeting, the foreign language teachers were thinking "outside box" about integrating languages into pathways. They are going to Wells and Fallon soon.

VII. Mid-Year Check in with Members

Some ideas for future meetings and speakers:

- A meeting for pathway groups to meet (ie: cross-district culinary)?
- More about community college certification cc programs in our area also at Chabot, Ohlone and DVC.
- Update on allied health programs at LPC – what are dates, when can we sell it to students.
- Speaker from the UC system regarding how to get a course UC approved- a career elective.
- Tri-Valley Community Foundation is working with Chevron. They are interested in engineering pathway and may have funding opportunities through Chevron.
- Invite actual employers for career resources.
- Pathways they want to work on
 - Media- middle schools in Dublin doing great things- need to build across districts
 - Smart grid/IT
 - Engineering/green engineering merging
 - Biotech

- Allied Health
- Culinary Arts
- Foreign Language- bilingual capabilities as an asset/ASL
- Manufacturing/construction- Dublin recently approved Construction Math
- IGETC- cross-district with CSUEB- concurrent enrollment to prep for 4 yr.

Volunteers were asked to serve from each district on an Energy Pathway Development Task Force. The group would also include other stakeholders and industry partners. Diane succeeded in attaining an SB70 grant for \$18,000 to continue our pathway work. Staff relief time is covered to review the pathways we started and a gap analysis. LPC also has money to work on these projects.

VIII. District team breakouts.

IX. The meeting adjourned at 10 AM.

Respectfully Submitted,

Susan Hayes