



Sacramento Capital Region Next Economy Cluster Update Workforce Action Plan, Education and Knowledge Creation Cluster

March 7th, 2016
University of the Pacific, Sacramento Campus
Series 4 of 6

Introduction

In fall 2016 Valley Vision, supported by JPMorgan Chase & Co. and in partnership with Los Rios Center for Excellence (COE) and the Burris Service Group, initiated a project to identify the current workforce needs of the six Next Economy high-growth business clusters in the six-county Sacramento Capital region. Next Economy is the region’s Comprehensive Economic Development Strategy (CEDS) as designed by the U.S. Economic Development Administration (EDA). This assessment was accomplished through quantitative research reports and qualitative validation of the data and emerging trends through employer and partner forums. These activities set the stage for action plans that identified priorities for each of the clusters.

Purpose

In 2011, Valley Vision along with leaders across the region undertook a major initiative called Next Economy. The goal was to transform a \$97 billion annual economy that suffered widespread hardship and a lagging recovery into one that is diversified, robust and sustainable. In 2012, as part of that effort, a region-wide economic analysis turned attention to six promising business clusters that could be catalyzed for job creation. They were identified as business clusters where the region has innate advantages and the strongest potential for growth based on economic performance indicators. Fast forward to today: our economy has recovered all the jobs that we lost, but the character of our economy is different.

Next Economy Cluster Research & Forum Overview

Valley Vision, the Los Rios Center of Excellence, and Burris Service Group, supported by JPMorgan Chase & Co., conducted economic research and employer and stakeholder forums to:

- Identify emerging workforce opportunities
- Generate workforce action plans
- Advance strategies to address critical workforce skills gaps
- Better align education and workforce development resources to meet employer and workforce needs a
- Improve the regional economy

This is a report of the employer and stakeholder forum. The research report can be found at:

<http://valleyvision.org/resources/education-and-knowledge-creation-workforce-needs-assessment>

Next Six High Growth Next Economy Clusters

Advanced Manufacturing

Clean Energy Technology

Education and Knowledge Creation

Food and Agriculture

Information and Communications Technology

Life Sciences and Health Services

JPMORGAN CHASE & CO.



The goal of the Next Economy Cluster Workforce Action Plan is to update the region's 2012 cluster economic analysis, identify critical workforce skills gaps that exist within the six clusters today; mobilize and align cluster stakeholders around job creation strategies, and create targeted workforce action plans for each cluster that target critical skills gaps, education and training resources, and implementation priorities.

Process

Los Rios Center for Excellence (COE), in partnership with the Burriss Service Group and Valley Vision, prepared six research reports, one for each cluster, that describe the workforce and economic characteristics of each cluster and education and workforce development resources for middle-skilled jobs, defined as jobs requiring more than high school degree. Valley Vision convened six Workforce Cluster Forums in the winter and spring of 2016 in collaboration with a wide range of partners. The fourth forum convened was for the Education and Knowledge Creation cluster.

Forum Overview and Purpose

The purpose of the Education and Knowledge Creation forum was to present the initial economic research findings to employers, industry experts and community partners and collect feedback on data findings. Feedback was gathered through a facilitated discussion where participants identified pressing workforce needs, current and future occupational demands, education and training resources, and potential priorities for a cluster action plan. The action plan is intended to tackle current and emerging cluster workforce needs and gaps. See Appendix A for Forum agenda.

Education and Knowledge Creation

Education and Knowledge Creation cluster includes industries and establishments that provide systematic information of Instruction for the purpose of knowledge creation or leaning. Within the cluster, there are five subsectors:

- Private Education Institutions
- Public Education Institutions
- Education Support Services
- Publishing
- Broadcasting

Source: COE, Education and Knowledge Creation Report, page 4

University of the Pacific, Associate Vice President for External Relations, Stacey McAfee welcomed participants and provided an overview of University of the Pacific's involvement in the community with workforce issues. See Appendix B for list of participants. Following Stacey, Betsy O'Brien, Vice President of Commercial Banking, JPMorgan Chase & Co., discussed JPMorgan's sponsorship of the project. Betsy touched on the company's launch of a \$250 million, five-year nationwide workforce readiness initiative- *New Skills at Work*- to help close the skills gaps in sectors where employers struggle to fill vacancies, and to assist job seekers to access the education and training required for those positions.

Presentation of the Research

Theresa Milan, Director for Northern California Region Los Rios Center of Excellence, gave a presentation on workforce trends and training gaps within the Education and Knowledge Creation Cluster. A definition of Education and Knowledge Creation subsectors was provided along with industry examples. As of 2015, the cluster consisted more than 105,000 jobs, equating 10% of the total regional employment, making it the second largest cluster for the region. Public Education institutions provide the best earning in the region with an average annual wage of \$74,679. The cluster did decline by 3% over the last five years due to state budget cuts in public education. The state's unpredictable funding cycles cause the cluster's workforce to go through series of growth and contraction. The cluster is projected to grow by 3% over the next five years, with the Public and Private Education subsectors projected to grow at 14% over the next five years and Publishing is expected to decline by 34% over the

same time span. Looking at new jobs, the cluster is projected to have more than 4,143 job openings. Openings and replacement jobs are projected at 5,089.

The cluster directly and indirectly employs 186,366 people in the region and contributes \$36.9 billion in output. Public Education Institutions, Education Support Services and Private Education subsectors are projected to have a strong five-year growth rate, whereas Publishing and Broadcasting has a negative five-year growth rate. The region's competitive advantage lies in Public Institutions, which has the largest concentration of employees in the region and a location quotation of 1.21. It is important to note that the trajectory of projected jobs can be accelerated or improved through targeted strategies. The full research report is available through the link provided on page one.

Employer Panel

The goal of the panel was to understand the workforce challenges that employers in the cluster are facing. Trish Kelly, Valley Vision, facilitated a discussion with a panel of four education institutional representatives and employers, listed below:

- Steve Boilard, Director, Sacramento State's Center for California Studies, Sacramento State
- Michael Elium, Assistant Dean for External Programs and Coordinator for Special Education, University of the Pacific
- Mary Martinez, Director of Sacramento Consortium Induction Program, Sacramento County Office Education
- Tarence Powell, Associate Vice President of Instruction and Student Learning, Cosumnes River College

Each panelist provided a brief introduction of their company or industry with an overview of company products and services, location, employment characteristics and target customers. The panelists were asked a series of questions:

- What surprised you about the research findings/information? Are they on target?
- What kind of positions do you have most difficulty filling?
- What skill sets are currently in greatest demand?
- What educational and training gaps do you see that we should address?
- What kind of workforce challenges do you see your company/industry facing?
- What is the most critical priority that an action plan should address?

Panel Discussion Highlights

Panelists were surprised to learn that the Education cluster was the second employment for the region and directly and indirectly employs 1 out of 4 people. The lack of knowledge on how large the cluster is in the Sacramento Capital region and the significant economic impact the cluster has on the regional economy is a key finding.

Teacher shortages throughout the region have been the primary focus area for employers. An explanation for today's teacher shortage is due to the 2009-2010 layoffs, over 30,000 teachers were laid off throughout California. Many people did not want to enter the occupation since job security was not guaranteed and education programs for teachers decreased. Another factor of teacher shortage is due to high teacher burnout rates. Approximately one-third of teachers leave the profession within seven

years of teaching. Local school districts that will have the greatest need for teachers will be, Sacramento Unified School District, Twin Rivers School District and Elk Grove School District. Though the overall economy and state budget that funds the state's public schools is improving, there is still a lack of future teachers in the pipeline. Class sizes have begun to decrease the number of students per teacher, resulting in a greater demand for teachers. The Sacramento region is projected to add 800,000 new residents within the next 21 years. This large migration of individuals and families will apply additional pressure to the private and public schools.

A serious concern that panelist discussed was the level of desperation the local school districts are becoming to fill teacher vacancies. School districts are strained and hire teachers that are not qualified or "high-quality" teachers, which in turn effects the students' educational attainment.

Other workforce challenges that were identified:

- Today's classes are no longer "traditional" classes; teachers need to be adaptable and know how to facilitate learning in different ways
- Large demand for online courses for teacher education programs and credential programs, this could resolve the waitlist issue
- Online classes are expensive and graduation completion rates aren't as high as traditional courses
- State test for teacher credential is very difficult and is not designed for online learning
- Priority should not be to fill the job openings but instead think where we want to go as a region and what steps do we need to take to get there
- Inconsistency of the state budget is an issue and is a direct effect of
- Need more education pathway pipeline (Placer County is the only one with pipeline)
- Today Sacramento region has approximately 70 principal openings
- High schools should have an academic course/program for getting students to think of teaching as a career choice
- Create a marketing and communicate piece about education career choices and make it appealing to the younger generation
- Need to build a better relationship between the different institutions
- Create partnerships with high schools and community colleges to talk to students one-on-one and show them various career pathways
- Education for teaching needs to be continuously and responsive to the changes that are occurring (such as common core)
- Faculty constraints with tenure
- Assist faculty and schools with navigating the changes because many of the faculty are not able to adapt to policy changes
- Need to address the burnout problem
- Teachers need to be culturally diverse and teachers should represent the student population so students can relate and think of teaching as a career
- People that want to be teachers should want to work with kids and want to teach
- Begin enrolling student into teaching credential programs and ensure the enrollment remains high to avoid future shortage
- Today, there are 56 teacher openings in Sacramento County that cannot be filled because of undersupply

Summary of Group Discussion

The employer panel was followed by a facilitated group discussion, where all forum participants were encouraged to provide feedback on high needs workforce gaps, key resources and recommended priorities. The group was asked two questions:

- What are the most critical workforce needs in the Education and Knowledge Creation Cluster?
- How can employers, workforce, economic development and education address these needs and which should be prioritized into a cluster action plan?

Figure 1 summarizes key issues that were discussed regarding the region's most critical workforce needs.

Figure 1: What Are Our Workforce Needs/Challenges?

Teacher Shortages	<ul style="list-style-type: none"> • Need teachers in early childhood, special education and k-12 substitutes • Address math, Science, language teacher shortage • Principal to teacher ratio is too large and there is a lack of leadership • 1/3 of workforce leaves every 7 years • Shortage on teaching people to become teachers
Changing Conditions of Education	<ul style="list-style-type: none"> • Teachers must be able to facilitate learning in different ways • Media/Technology requires students to be nimble • Teachers need to learn/adopt new technology demands • Changing needs i.e. common core standards
Teacher Burn Out	<ul style="list-style-type: none"> • Work & life balance for teachers is very difficult • Changing policies and expectation for teachers is challenging and tiring
Pipeline/Pathway	<ul style="list-style-type: none"> • More education pathway pipelines in high school and earlier levels • Maintain aspirational perspective, not just fill worker demand gaps
Career Awareness	<ul style="list-style-type: none"> • Communicate about opportunities in teaching profession • Diverse teachers can serve as models to students and teachers should represent large population • Non-traditional students/re-training opportunities • Awareness of teaching profession should start as early as elementary or middle school level
Prepare Future Teachers	<ul style="list-style-type: none"> • Increase support in the classroom to help teachers • Prepare teachers with changing students • Find ways to support diverse ways of teaching • Better the pipeline so teachers with degrees and credentials feel more prepared (64% of grads feel under prepared)
Connecting Across Systems	<ul style="list-style-type: none"> • Have the teacher workforce representatives more accessible by coming to talk to students or attend career fairs • Need to prepare workforce with soft skills • Demand for STEM degrees (supply side) • Acceptance into a credential program is difficult • All education systems need to improve connect with each other
Educational Strategic Vision	<ul style="list-style-type: none"> • Need strategic educational vision • Education system is slow to change and takes too long • Need more information about retirement projections • Integrate systems/ break down silos • Connect steady funding with this work

Participants were asked to suggest actions by employers, workforce, economic development and education to respond to these needs. Figure 2 summarizes the input.

Figure 2: What Priorities Should Be Implemented For An Action Plan?



Participants then were given three votes to indicate the highest priority issues. The top priorities are shown in Figure 3.

Figure 3: Top Action Items/ Priorities
1. Develop a communications/marketing strategy to attract students early on and recruit second career professionals to the teaching profession.
2. Help temporary teachers who are on a short-term permit to obtain their teaching credentials within the one-year deadline, while teaching.
3. Use tools for dual enrollment with Community colleges and high schools (AB288).
4. Bring the cluster together to create a vision and strategy to align regional stakeholders across all levels of the education system; chart short-term solutions.
5. Develop a regional policy platform and advocate for stable and sustainable education system funding formulas, to address teacher shortages and support.
6. Reduce the time to complete college for potential teachers.
7. Develop strategies to retain teachers and reduce teacher burnout.
8. Expand the education pathway pipeline and credential programs for gaps in sub-specialties, including special ed, early childhood, technology, math and science.
9. Develop a faculty diversity internship program.

Overarching Themes and Education and Knowledge Creation Specific Recommendations

On May 3rd, Valley Vision hosted the 2016 Capital Region Workforce Summit at UC Davis. The Summit presented new research findings on high priority skill gaps facing the Next Economy clusters and cluster specific action plans from all six-cluster forums with regional employers, education institutions, workforce development agencies and industry partners. Valley Vision presented both overarching themes that emerged from all the cluster forums and research, and cluster-specific recommendations to support each unique economic cluster.

The overarching themes related to workforce needs across all clusters were:

- **Career Awareness:** Implement a major region-wide Marketing and Communication campaign to elevate awareness of high demand career opportunities across all business clusters. Targets include: elementary and middle school, millennials, workers in need of re-skilling and parents
- **College/Career Readiness:** Accelerate the number and type of internships, apprenticeships, and on-the-job training opportunities for students and current workers. Expand non-traditional apprenticeships; increase the number of maker spaces and access to state of the art equipment; address barriers to employer partnerships
- **Diversity of the Workforce:** Adopt and invest in successful employer models to increase workforce and employer diversity, including women, low income and minority students and workers. Provide access to STEM programs for all; bring career awareness earlier through schools (K-12)

- **Additional Research on high demand occupations and skills:** Conduct in-depth research with employers on projected and emerging in-demand occupations, skills requirements and training resources not captured in the research data. Areas include: Clean Economy, Food and AG, Education, and cross-cluster opportunities such as ICT & Health
- **Alignment of education and training resources:** Increase engagement and alignment of resources and institutions across employers, educational systems, economic and workforce development and community partners. Align community colleges with 4-year institutions and strengthen pathway programs.

The issues that were of the highest priority in Education and Knowledge Creation were:

- Develop a **communication/marketing strategy** to attract students early on and recruit second career professional to the teaching profession.
- Help temporary teachers who are on a **short-term permit** to obtain their teaching credentials within the one-year deadline, while teaching.
- Use tools for **dual enrollment** with community colleges and high schools (AB288).
- Bring the cluster together to create a vision and strategy to **align regional stakeholders** across all levels of the education system and chart the short-term solutions.
- Develop a **regional policy platform** and advocate for stable and sustainable education systems funding formulas, to address teacher shortages and provide support.
- Reduce the time to **complete college** for potential teachers
- Expand the **educational pathway pipeline** and credential programs for gaps in sub-specialties, including special education, early childhood, technology, math and science
- Develop a faculty diversity internship programs.
- Develop strategies to retain teachers and reduce **teacher burnout**.

Conclusion and Next Steps

The input from these forums provided specialized knowledge about workforce needs from local companies and educational and training institutions. Through this process, our region optimized the benefits of the economic recovery by mobilizing cluster stakeholders, creating an understanding of the current state of our clusters, and strategically planning for continued prosperity, job creation and growth. The economic cluster research, forums and Workforce Summit were key steps in better understanding current economic, educational and workforce issues that are at play in the current regional environment. These set the stage for action strategies to address the needs that were identified. Valley Vision will move into Phase II of cluster action plan implementation in fall of 2016 and throughout spring 2017.

Appendix A: Agenda



Capital Region Education and Knowledge Creation Workforce Cluster Forum

March 7, 2016, 8:30 AM – 12:00 PM University of the Pacific
Sacramento Campus: 3200 Fifth Ave, Sacramento, Classroom E

Project Partners:



Golden Sierra



AGENDA

8:30- 9:00 AM Registration

9:00- 9:15 AM Welcome and Introductions

- *Trish Kelly, Senior Vice President, Valley Vision*
- *Stacy McAfee, Associate Vice President for External Relations, University of the Pacific*
- *Betsy O'Brien, Vice President of Commercial Banking, JP Morgan Chase & Co.*

9:15- 9:45 AM Presentation of Cluster Analysis

- *Trish Kelly, Valley Vision*
- *Theresa Milan, Center of Excellence Director for Northern California Region, Los Rios Center of Excellence*

9:45- 10:45 AM Employer Panel—Facilitated by Trish Kelly

- *Michael Elium, Assistant Dean for External Programs and Coordinator for Special Education, University of the Pacific*
- *Steve Boilard, Director, Sacramento State's Center for California Studies*
- *Torence Powell, Associate Vice President of Instruction and Student Learning, Cosumnes River College*
- *Marty Martinez, Director of Sacramento Consortium Induction Program, Sacramento County Office of Education*

10:45 AM- 12 PM Facilitated Discussion—High Need Workforce Gaps, Key Resources, and Recommended Priorities

- *Evan Schmidt, Project Manager, Valley Vision*
- *Trish Kelly, Senior Vice President, Valley Vision*

Appendix B: Participant List

First Name	Last Name	Organization
Jared	Amalong	Placer k-12
Steve	Boilard	Sacramento State
Steve	Boilard	Sacramento State
Larry	Burkhardt	ED Sacramento
Kari	Decker	JP Morgan
Tatiana	DeLeon	SETA
Robert	Dugan	Sacramento State
Michael	Elium	U of P
Michael	Faust	University of Warwick
Phil	Garcia	Sacramento State
Rod	Githens	U of P
Terri	Griffin	CRANE
David	Harris	U of P
Trish	Kelly	VV
J. Frank	Malaret	Los Rios
Marty	Martinez	SCOE School of Education
Suzanne	Mayes	Teach for America
Theresa	Milan	Los Rios
Samantha	Minor	VV
Teri	Munger	Los Rios
Betsy	O'Brien	JP Morgan
April	Parish	Sacramento State
Dean	Peckham	ED Sacramento
Torence	Powell	Consumnes River College
David	Robertson	Twin Rivers k-12
Evan	Schmidt	VV
Jacqui	Sjol	
Shawn	Tillman	ED Lincoln
Brent	Watters	JP Morgan
Gregory	Williams	SETA
Mary	Wolf	ARC
Pia	Wong	Sacramento State

Appendix C: Employer Panel Bios

Michael Elium, Assistant Dean for External Programs and Coordinator for Special Education, University of the Pacific

Michael Elium is currently Assistant Dean of External Partnerships and Coordinator of Special Education Programs in the Benerd School of Education at the University of the Pacific. He has been responsible for developing and leading Pacific's master's and doctoral programs in Shanghai, China and Urban Teacher Residency Program partnership in California. He teaches graduate students in special education, school psychology and education leaderships. Immediately prior to coming to Pacific in 2004 he was Director of Psychological Services/Special Education of an ethnically diverse school district in Northern California.

Steve Boilard, Director, Sacramento State's Center for California Studies

Boilard has extensive experience in government and education. During his 14 years in the Analyst's Office, he has served as the managing principal analyst, director of Higher Education, and a senior analyst. He also has been an assistant professor at Western Kentucky University, an instructor at UC Santa Barbara, and a policy analyst with the California Department of Housing and Community Development. He holds a doctorate in Political Science from UC Santa Barbara.

Torence Powell, Associate Vice President of Instruction and Student Learning, Cosumnes River College

As dean, Powell managed seven academic departments in the visual and performing arts arena. Powell now serves as the Associate Vice President of Instruction and Student Learning. He also serves on the boards of two local education-based nonprofits that seek to increase college matriculation rates of underrepresented first-generation students and students of color.

Marty Martinez, Director of Sacramento Consortium Induction Program, Sacramento County Office of Education

Marty Martinez, Director of Sacramento Consortium Induction Program, Sacramento County Office of Education

Prior to becoming the Director of Sacramento Consortium Induction Programs, Marty was a principal for the Elk Grove Unified School District for 15 years. The Sacramento County Office of Education's Beginning Teacher Support and Assessment (BTSA) Induction Consortium has been serving participating teachers since 1992. SCOE's BTSA Induction Program partners with Charter, Private and District programs to administer a CTC approved two-year Induction program for General Education Multiple and Single Subject and Education Specialist Clear Credentials.