



New World of Work

Community Colleges and 21st Century Skills: Skills Panels to Assist Student Career Success

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Background on Skills Panels

Through the California Community Colleges Chancellor's Office, the Division of Workforce and Economic Development seeks to prepare California's workforce for 21st Century careers. The Division serves as administrator for several streams of state and federal funds, including the Governor's Career Technical Education Pathways Initiative (SB70), Carl D. Perkins Career and Technical Education Act of 2006, and Proposition 98 dollars for Apprenticeship, Economic & Workforce Development (EWD), and Career Technical Education (CTE).

<http://extranet.cccco.edu/Divisions/WorkforceandEconDev.aspx>

The Division collaborates with employers, organized labor, local communities, and their community colleges through programming supported by these funds. The opportunity exists for community colleges to utilize grants and become essential catalysts in California's economic recovery and work creation at the local, regional and state levels.

The Chancellor's Office, within the 2011-2012 grant funding cycle, announced a new strategic initiative in California: *Doing What Matters for Jobs and the Economy*. Under this commitment, community colleges can help align the needs of employers with education and training options for students through creating Skills Panels. These panels provide a forum to solve workforce problems by encouraging companies and organizations, which might otherwise be in competition, to collaborate on identifying the critical skills needed by employees. <http://doingwhatmatters.cccco.edu>

By bringing together education, public workforce training, and business and industry experts, skills gaps can be identified. Plans can be made to connect students with the necessary training and educational resources to close the gaps and ensure a globally competitive, viable economy. Skills Panels provide a more entrepreneurial perspective than traditional advisory boards because they focus on creating innovative solutions and training programs based on real-time requirements.

<http://cccewd.typepad.com/ewdblog/2012/05/the-innovations-of-skills-panels.html>

In the Spring Term of 2013, the Career Technical Education & Economic Workforce Development grants (CTE & EWD) at Feather River College, under Director Amy Schulz, partnered with Aquarian Technology Systems, Ltd., under President Dave Baldwin, to create a series of Skills Panels in Northern California. Separate panel forums were held to capture the points of view of three distinct audiences.

An Entrepreneurial Skills Panel, held in San Francisco, CA on April 18th 2013, involved educators, business representatives, and researchers who could speak to the knowledge-based economy and how to apply emerging trends within academic settings. A Student Skills Panel, held at Feather River College on June 17th 2013, sought insight from students who represent the future and transitioning workforce present in California Community Colleges. A Rural Skills Panel, held in Quincy, CA on June 19th 2013, focused on the needs of rural communities in Northern California, where there is a current transition from a goods-based economy to a digital economy.

Reference Materials for Skills Panels

To help frame the discussions at each Skills Panel, the collaborative established a focus on the “New World of Work,” a concept that encapsulates the need for data-driven and futurist research when looking at 21st Century workplace and education trends. Additional information, resources, and partnering opportunities within the New World of Work can be found at: <http://www.newworldofwork.org>.

Entrepreneurial Skills Panel

The Entrepreneurial Skills Panel was comprised of leaders from innovative, tech driven careers as well as educators teaching entrepreneurial skills. Therefore, the reference materials used to frame the discussion focused on how current economic and social shifts are creating observable changes in the skill sets required by all 21st Century workers, respective of Industry Sectors. Within this context, the traditional definition of an entrepreneur expands from an individual who transforms innovation into economic goods, into the need for all individuals in our modern workforce to develop entrepreneurial skill sets.

The 2012 State New Economy Index Report (Atkinson & Stewart, 2012) provided framework for the discussion. The report was produced by the Information Technology and Innovation Foundation in Washington D.C. The data indicate that for the United States to be viable within a global economy, it will need to compete more on the basis of innovation and entrepreneurship and less on cost.

Nations such as China, India, and Mexico are enabling easy access to low-cost production systems. The competitive advantage the United States will have to rely on is to make goods and provide traded services that other nations are unable to make or provide as easily or as efficiently. Success in this means having a workforce and careers based on higher skills; strong global connections; dynamic firms, including strong, high-growth startups; industries and individuals embracing digital technologies; and strong capabilities in technological innovation.

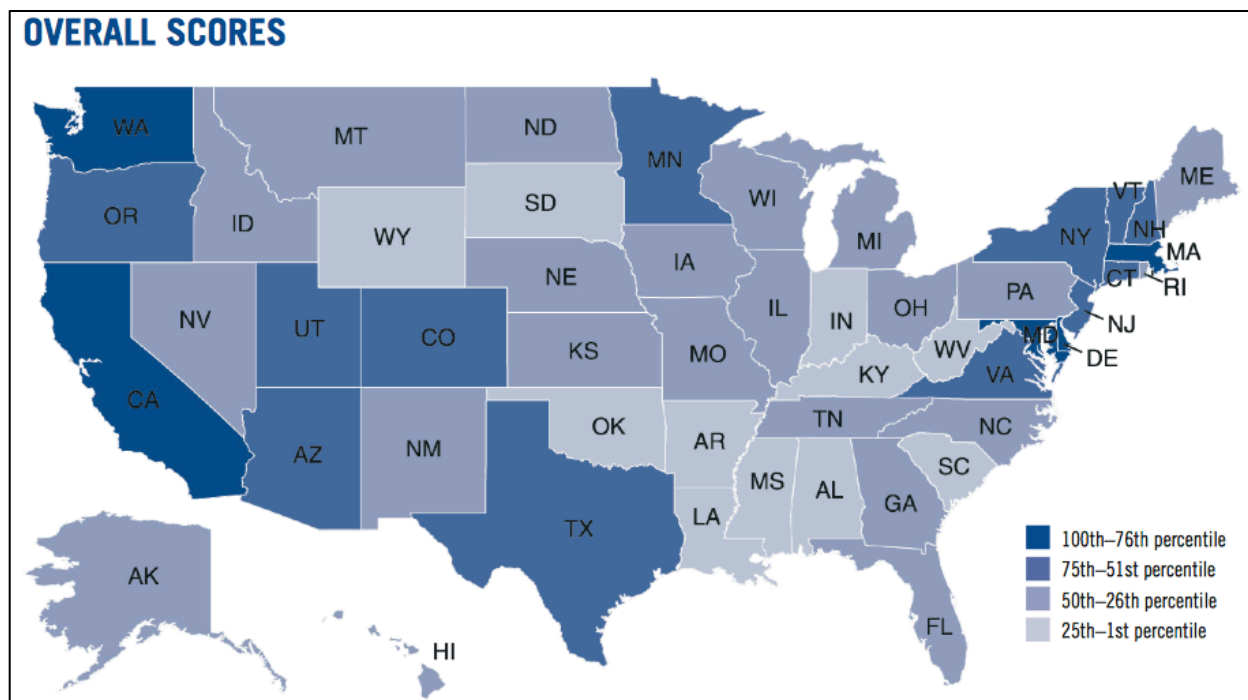
These indicators are the same for state economies, so the report focuses on five areas: knowledge jobs, globalization, economic dynamism, the digital economy, and innovation capacity. California ranks fourth within this evaluative scale, as it thrives on innovation capacity, due in large part to Silicon Valley and high-tech clusters in Southern California. California also dominates in venture capital, receiving 50% of all U.S. venture investments, and also scores extremely well across the board on R&D, patent, entrepreneurship, and skilled workforce indicators.

Co-author of *The 2012 State New Economy Index Report*, Dr. Robert Atkinson, provided an introduction through Skype to explain the economic implications of the report to panel participants.

2012 State New Economy Index Report

<http://www2.itif.org/2012-state-new-economy-index.pdf>

California's 4th place ranking based on composite score for knowledge jobs, globalization, economic dynamism, the digital economy, and innovation capacity.



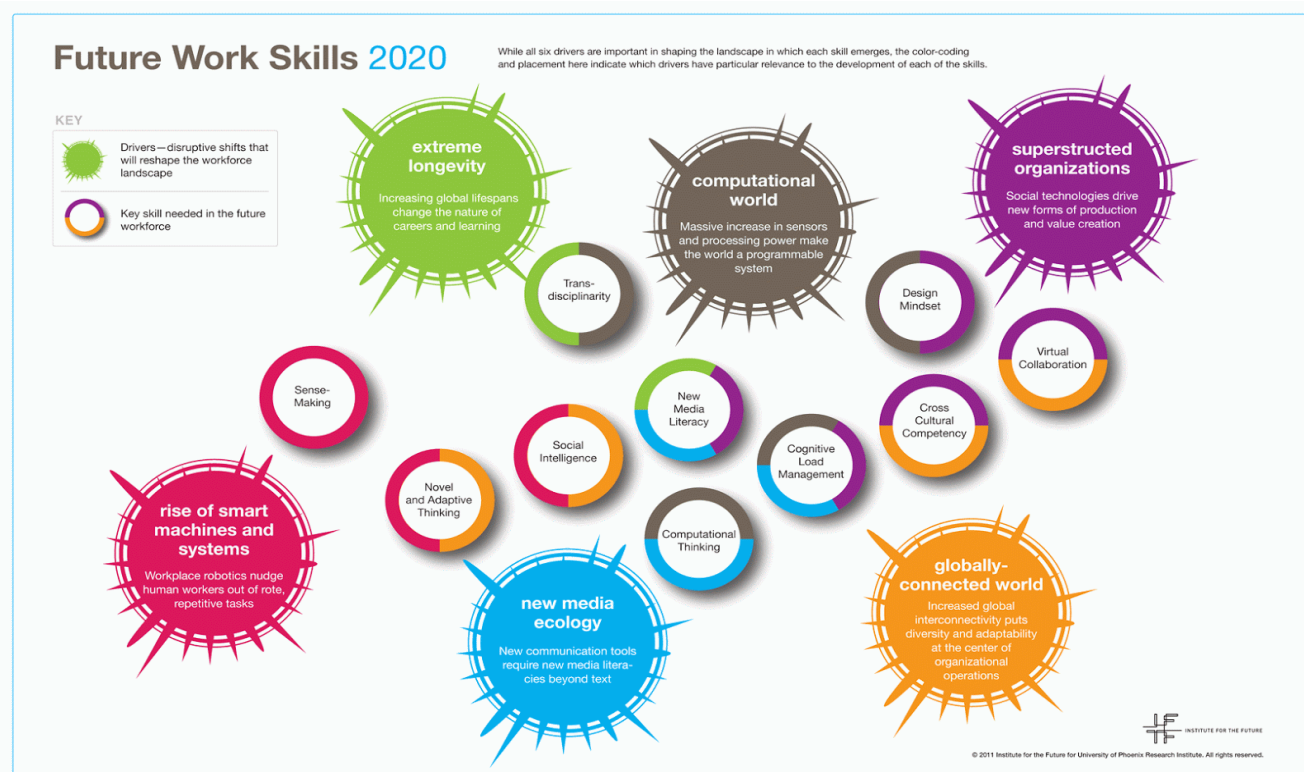
2012 Rank	2012 Score	State	1999 Rank	2002 Rank	2007 Rank	2010 Rank	Change from 2007*	
							2007*	2010*
1	92.4	Massachusetts	1	1	1	1	+0	+0
2	82.1	Delaware	9	9	7	6	+5	+4
3	79.5	Washington	4	4	4	2	+1	-1
4	79.1	California	2	2	5	7	+1	+3

The second foundational report used for the Entrepreneurial Skills Panel was *Future Work Skills 2020*, produced by the Institute for the Future for the University of Phoenix Research Institute (Davis, Fidler, & Gorbis, 2011). The research in this report centered around the “Six Drivers of Change,” namely the current social shifts that act as disrupters and change agents moving us into the future of required work skills.

Driver 1 is Extreme Longevity, or the phenomenon that increasing global lifespans will change the nature of careers and learning. Driver 2, the Rise of Smart Machines and Systems, indicates increasing workplace automation will nudge human workers out of rote, repetitive tasks. Driver 3 is a Computational World, where massive increases in sensors and processing power make the world a programmable system with enormous quantities of trackable data. Driver 4, New Media Ecology, addresses emerging communication tools requiring media literacies beyond just text literacy. Driver 5 relates to Superstructured Organizations, or collaborations at extreme levels such that social technologies will drive new forms of production and value creation. Finally, Driver 6 is a Globally Connected World, where increased global interconnectivity puts diversity and adaptability at the center of organizational operations.

Co-author of *Future Work Skills 2020*, Devin Fidler, was a participant at the Entrepreneurial Skills Panel and helped explain the factors involved in the changing workforce environment presented throughout the report.

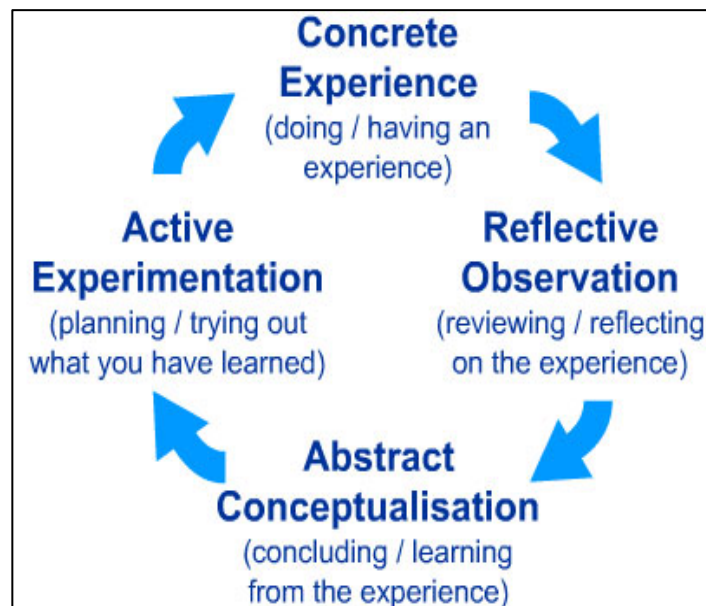
http://www.iff.org/uploads/media/SR-1382A_UPRI_future_work_skills_sm.pdf



Student Skills Panel

To help frame the Student Skills Panel, the Slideshare of PSFK Lab's *The Future of Work* report (psfk, 2013) was utilized as a summary of four major trends taking place: the emerging "Ideal Workforce," an "Empowered Culture," "Intuitive Connection," and "Agile Workplaces." The "Ideal Workforce" encapsulates a skills based marketplace, often where online badges indicate skill achievements. The "Empowered Culture" of emerging work teams means employees become stakeholders who can manage their time more autonomously. The "Intuitive Connection" amongst workers revolves around social workflow, including the use of cloud sharing tools. "Agile Workplaces" rely on co-creation spaces such as innovation hubs and pop-up workplaces with flexible furniture and office designs. <http://www.slideshare.net/PSFK/psfk-presents-future-of-work-report>

To further elaborate the learning by doing concept included in PSFK's *The Future of Work* report, an overview of the "Experiential Learning Theory" provided the definition that hands-on learning is "the process whereby knowledge is created through the transformation of experience" (Kolb, 1984). In a four stage learning cycle, concrete experiences become the basis for observations and reflections. Reflections, in turn, are assimilated and distilled into concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences (Kolb , Boyatzis & Mainemelis, 1999).



Both the *The Future of Work* report and the "Experiential Learning Theory" were used as the basis for the student panel to create a dialog where students felt encouraged to take ownership over their own learning. The discussion focus was on how students would want to shape educational experiences, rather than the educational institution alone setting standards to follow. Providing these opportunities for student self-awareness and self-advocacy is currently seen as integral to Student Success Scorecard initiatives on California college campuses.

Rural Skills Panel

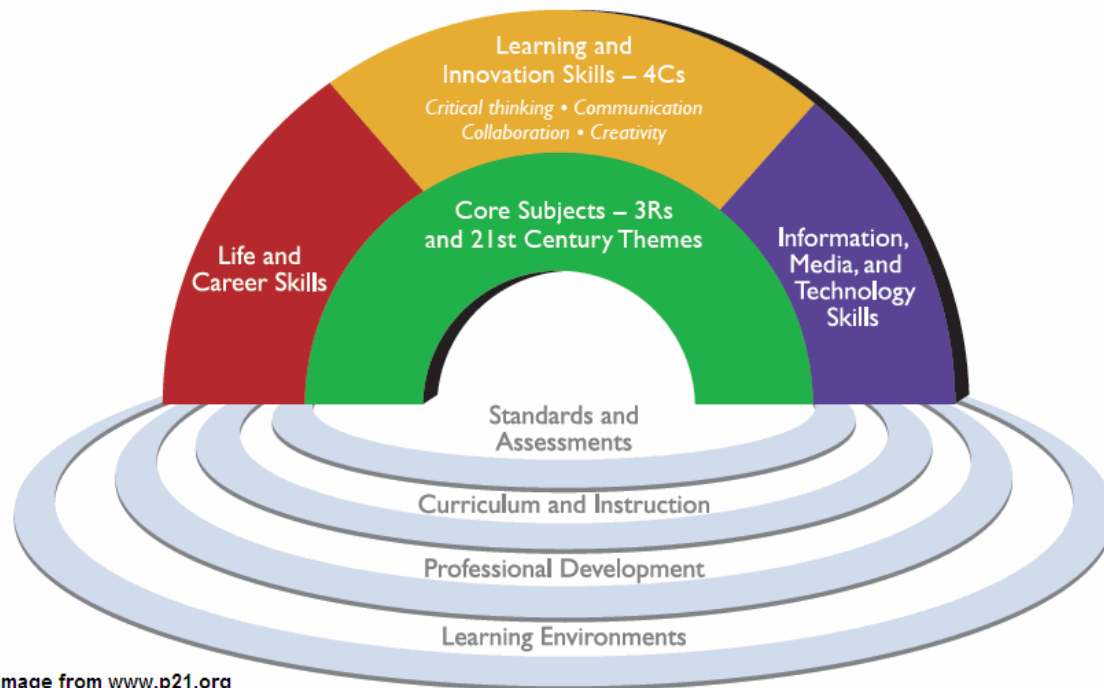
The participants at the Rural Skills Panel were primarily educators from secondary schools with key representatives from community college educational settings and rural based businesses. The reference materials used to frame the discussions during the panel centered on comparisons of the 20th Century World of Work versus the 21st Century New World of Work and how these changes correlate to the recently adopted Common Core State Standards at the secondary education level.

An introductory presentation incorporated the video lecture, *How You Will Work in the Future*, from Glen Hiemstra, a participant in the Co.Exist Futurist Forum series (Fast Company, 2013). One theme in the lecture is learning communities must emerge to support broad based education, rather than the traditional silos where education has been seen as primarily the responsibility of teachers in schools. This expansion of the concept of education also reinforces the legitimacy of Skills Panels as a viable means for creating learning communities.

The video lecture highlights the differences in the 20th Century Industrial Economy and the 21st Century Innovation Economy. In the 20th Century, work was organized into jobs, i.e. working for someone else with instruction, during set amounts of time each day, and in exchange for an established wage that often included benefits such as health insurance and retirement. In the 21st Century, jobs by this definition are disappearing, and work is now organized around the stint, i.e. short term or project based work that is aligned with various companies and/or done as independent contract agreements. The stint requires a workforce comfortable with change, adaptation, and lifelong skill building. It also moves away from the security of health benefits and retirement provided through employers. <http://www.slideshare.net/ghiemstra/future-of-work-and-jobs-2013>

To address an ever changing, stint-based work world, where education itself needs to be adaptable, the State of California has aligned the Common Core Standards with the Partnership for 21st Century Skills (p21.org, 2013). The objectives of the Partnership are to expand the 3 R's in education: Reading, Writing, and Arithmetic into Rigor, Relevance, and Relationships. The 3 R's are then combined with the 4 C's: Critical Thinking, Communication, Collaboration, and Creativity. This combined focus is meant to promote curriculum and hands-on experiences for students to prepare them for postsecondary education and careers.

Science, Technology, Engineering, Arts, and Math (STEAM) programs as well as Linked Learning, education pathways that "link" student interests to college/career preparation experiences, all fit under the umbrella of 21st Century objectives within Common Core curriculum. The implementation of 21st Century Common Core curriculum relies heavily on educators and public/private sector employers collaborating to provide learning opportunities for students. Again, this concept supports Skills Panel creation as a valuable means of bringing together individuals who can share their expertise to establish broad-based learning communities.



Facilitation Strategies for Skills Panels

Located in a relatively isolated and rural community, the CTE/EWD Grants Team at Feather River College developed the strategy of separate Skills Panels to capitalize on the input of experts outside of the local county, as well as those within it. Separate panels were also chosen so peers could collaborate with one another based on similar professional and/or educational settings. The discussion trends could then be recorded and shared with other panels such that each panel had a distinct framework, as evidenced by the reference materials used, but commonalities amongst all the panels could be tracked.

Workshop facilitation itself was grounded in both inquiry and dialogue. The format of questioning was based on author Warren Berger's concept of promoting innovative change by utilizing thought provoking questions posed in collaborative settings (amorebeautifulquestion.com, 2013). Dialogue rather than debate was chosen as a means to encourage discussion and consensus, based on the Socratic Method (Learn NC, 2013). The Socratic Method requires setting up a discussion space where participants can face one another, whether in a large circle or semi-circle, or at table clusters. This spatial orientation reinforces a shared experience rather than a lecture style experience. Participants are encouraged to provide feedback on questions both as individuals and within working groups in order to build on one another's ideas through dialogue versus persuasion or debate.

Workshop facilitators asked participants to introduce themselves and provide a short summary of their professional backgrounds. The definition of Skills Panels was provided along with a summary presentation of the reference materials used to frame each panel. Questions were then posed to participants based on the focus of the panel. All feedback was recorded through scribing in front of the group and through note taking.

Entrepreneurial Skills Panel:

1. What do you identify as essential, emerging skills in today and tomorrow's work environment?
2. How essential are entrepreneurial skills in the New World of Work?

Student Skills Panel:

1. What 21st Century Skills do you think are the most important for students to learn before entering the workforce?
2. Based on the ideas from the group, what would you pick as the "Top 10" 21st Century Skills?

Rural Skills Panel:

1. How do you envision the future of work in our Region?
2. What 21st Century Skills do you feel are necessary for our students to learn?

Qualitative Data from Skills Panels

Entrepreneurial Skills Panel

Numerous themes emerged from participant's perceptions of the New World of Work during the Entrepreneurial Panel in San Francisco. One was the need for individuals to go into the workforce with self-awareness of their personal skills sets. These skills should be coupled with a sense of adaptability and a comfort with pivots, times when an individual transitions from one type of work to another, in order to fit into an ever changing economic ecosystem. To this end, students should be given opportunities to engage with learning through interactive means, such as with gamification technology and projects, and through collaboration that involves both in-person interaction as well as virtual. Education itself, the way it is perceived and valued, is also undergoing a change where some work requires higher degrees while other employment opportunities rely heavily on peer evaluation of skill sets and a proven track record of contract work. In this context, skill building becomes a mixture of innate talents and those that can be developed, often through the help of mentors.

Numerous 21st Century Skills emerged from participant discussions, with the point that an individual does not need to master an exhaustive list of skills but rather capitalize on the skills he/she is most suited to. Some of these skills are: dealing positively with failure and mistakes, the ability to collaborate virtually and within a global context, autonomous time management especially in project based work, adaptability and resilience, responsible decision making, learning how to question and observe with a solution mindset, communicating effectively especially verbally and in writing, the ability to self-reflect with humility, the ability to conduct research including researching available work, utilizing empathy in a professional setting, comfort with feedback and resolving conflicts, and an overarching entrepreneurial mindset.

Student Skills Panel

During the Student Panel at Feather River College, participants had an open forum to suggest skills they felt were needed to prepare them for success in the 21st Century New World of Work. These skills were recorded on post-it notes and displayed. Students then directly modeled the skill of building consensus while working as an entire group to categorize the skills based on perceived overlap and commonalities. It is important to note the students felt combining skills within thematic categories was preferable to eliminating any of the skills that had been suggested. A basic respect for personal opinion was maintained while working as a group to determine the “Top 10” 21st Century Skills.

The following skills emerged, with no hierarchy of importance placing one skill above any others: an entrepreneurial mindset including seeking out networks and mentoring; the ability to collaborate virtually and develop an online presence; lifelong adaptation where an individual is comfortable with flexible hours, time management, and troubleshooting; in-person collaboration with an ethic of teamwork; personal skills brought into work to promote caring, creativity, fun, stress reduction, ethics, and goals; lifelong education and training; solid communication skills; a mastery of basic skills including reading, writing, math, and computer literacy; professional skills including appropriate attire, ability to conduct presentations, being on time, and a strong work ethic; and diversity awareness in terms of multi-generations, multi-languages, and global cultures.

Rural Skills Panel

The Superintendent of Plumas Unified School District, Micheline Miglis, and the President of Feather River College, Dr. Kevin Trutna, both attended the Rural Panel in Quincy, CA to remind participants that preparing students for their futures is the shared responsibility of entire communities. Discussion at the panel incorporated suggestions for creating learning moments by putting curriculum into a real world context; providing opportunities for students to experience workplace awareness either through internships or guest speakers in the classroom; creating a database of working professionals willing to donate their time to educational workshops and activities; and looking at the models other secondary schools are incorporating to implement Linked Learning.

During the Rural Panel, participants worked within table groups to discuss their ideas on essential 21st Century Skills students should be exposed to through educational initiatives. The skills lists were recorded and posted for each table. The entire group as a whole went through a similar process to the Student Panel where skills were categorized to come up with a “Top 10” list. The group felt proficient use of technology was integral not only to emerging knowledge economy work but also traditional work that must adapt to fit a modern context. Therefore, tech literacy was deemed a skill required across all the ten skill categories. The group provided the following skills: collaboration including teamwork, conflict resolution, and leadership; communication involving global awareness, written and verbal communication, and interpersonal communication; social skills related to customer service and civility; critical thinking involving the ability to discern credible sources, analysis, synthesis of ideas, finding solutions to problems, and foresight; self initiative; passion and finding your niche; empathy; adaptability; professionalism including responsibility, understanding the impact of choices, and a work ethic; and innovation with entrepreneurial skills including the ability to market your ideas, moving through failure, applying creativity, and future thinking.

“Top 10” 21st Century Skills

Although each panel was distinct, common themes emerged throughout and provided the basis for the final list of “Top 10” 21st Century Skills and Best Practices for developing New World of Work curriculum.



Self-Awareness: In order to succeed in the 21st Century workforce, students must be acutely aware of their strengths, values, and propensities. With an ever-shifting work environment, instead of training for a narrow and rigid career path, workers need to have a deep understanding of their own transferable skills and strengths that could be applied in seemingly disparate work situations. Workers must be prepared to pivot as technology continues to transform industries and forces some career paths into obsolescence. While jobs may disappear, personal skills, strengths, and values will guide the 21st Century workers' next steps. Students should engage in self-assessments, such as the Keirsey Career Assessment and Gallup StrengthsQuest, to help develop their self-awareness.

Social/Diversity Awareness: Working in global and multi-generational teams is another characteristic of the 21st Century workplace. Workers should be comfortable in short, stint projects with a variety of teams made up of members from varying socioeconomic, generational, cultural, and national backgrounds. Gaining an understanding of how to work with others from different backgrounds will be of distinct advantage to the 21st Century worker. Advances in technology have resulted in unprecedented expansion in virtual teams composed of members from around the globe. Workers must have some awareness of cultural customs to communicate effectively and create a nurturing and productive team environment. Role-playing and gamification will be integral tools in teaching social and diversity awareness to students.

Resilience (especially after failure): Although today's students are graded on their successes, there is an ever-growing need to embrace failure in the modern workplace. True innovation requires a risk-averse attitude to try something new with the knowledge that it may not work the first time. To set themselves apart from their global competition, students need a healthy relationship with failure. Traditional work practices that can be automated or systemized, such as call centers, standard accounting and bookkeeping, and even basic legal functions, will be outsourced to nations with highly educated workforces for lower pay. To stay competitive, American workers will need to capitalize on their innovation and creativity, which is often developed through the process of failed projects and re-visioning. Many employers will seek out innovators from within their own organizations or contract with freelancers who are known for their creative thinking. American workers will have to be comfortable with taking risks to innovate, learning from failure, and adopting an attitude of resilience. Many of our education systems shun failure. Instead, we should incorporate elements of experimentation into assessments to encourage innovation and resilience as a mindset. Teaching students the elements of a growth mindset rather than a fixed mindset will further aid their comfort with failure as a part of personal skill development.

Empathy: Empathy is a critical trait in the 21st Century workplace for several reasons. Empathy within a team is important to accept and learn from failure. To have a truly innovative team, all members must tolerate the risk for failure and be able to empathize with members who experience disappointment in order to be more resilient and build from that experience. In a stint-based, not job-based economy, workers need to establish trusted relationships with a variety of potential team members to be accepted into the next project team. The mindset shift away from a steady job at an organization

can also change how people view one other. Instead of seeing peers as potential competition, they should be seen as potential allies or collaborators. Empathy is at the core of deep and trusted relationships, which will be necessary for successful collaborations. Entrepreneurs will need to rely on empathy to understand the needs and challenges of their customers, resulting in new solutions and services. Traditionally, empathy is not taught or assessed through education, but it should be added to curricular requirements to fully prepare the future workforce.

Communication: The 21st Century workplace requires communication both online and offline. Understanding the nuances of communication through digital technology, such as email, video conferencing, texting, blogging, and social media, is just as important as face-to-face interactions and group communication. Workers will rely on their reputations to obtain work, so the ability to effectively communicate virtually and in person will be even more critical. Once work is obtained, proficiency in utilizing a variety of communication tools, including video conferencing and collaborative computing, will be necessary to effectively work within virtual teams. In both virtual and in person settings, communication etiquette will add to or detract from a worker's reputation. Students should be exposed to communication tools before entering the workplace. This can be done through sophisticated distance education courses or experiential learning that requires virtual collaboration. Instruction on verbal, non-verbal, and written communication rules will also benefit students preparing for the workforce.

Adaptability: Workers in the 21st Century must be prepared for changes that could completely transform their careers at any time. Broader changes could come in the form of technological advances, economic structural changes, or shifts in demographics or consumer preferences. Smaller shifts that could disrupt work life include changing project teams, emerging conduits or platforms to acquire work, retraining to update skills, and changes in employment status from employed to self-employed. Workers need to be tolerant of inevitable changes in the work environment and adapt accordingly. While the future world of work will be evolving and changing rapidly, self-awareness will be a key component of successful adaptability. Students who cultivate a thorough understanding of their own strengths, values, and skills will be more prepared to adapt with change. It is equally important to share with students the research about emerging workforce trends to acculturate them to the idea of workplace adaptability versus having one career that will span 30 or 40 years.

Collaboration (virtually and in person): With the shift in work occurring from a stationary place to remote work, and the nature of work transforming to shorter-term project partnerships, 21st Century workers will need to be excellent collaborators. Collaboration will come in the form of freelance teams formed for specific projects or entire organizations that will need to collaborate to reach shared goals. Workers will need to be able to recognize good partners, employing empathy to see the partners' points of view. A worker will also need to understand how to bring value to a collaborative partnership, which includes an understanding of his/her own core skills. In addition to navigating stakeholder needs through collaboration, a thorough understanding of how to best utilize cloud-sharing tools to enhance collaborative work will be necessary. Today's students can practice collaborative skills in traditional class

group work, through service learning projects uniting diverse groups, and in extra-curricular organizations. Virtual collaboration, such as video conferencing and virtual project management, can be integrated into distance education courses.

Digital Literacy: Digital technology is the underlying force behind the acute changes in the modern workplace. Digital technology dictates how workers can collaborate, organize, and communicate remotely. 21st Century workers must be comfortable with current technology and be willing to adapt to emerging technology as it pertains to their specific industries. Students must therefore be comfortable with technology as a medium to upgrade their skills and knowledge, as a platform for professional self-marketing, and as a means to find work and project partners. As students are exposed to current digital technology, they should also learn the skills and mindset to seek new technologies, which will in turn enhance their work life.

Entrepreneurial Mindset: An entrepreneurial mindset is at the core of future work. Workers will need to be able to recognize opportunities and learn from failure. Those who cultivate a strong network to tap into for assistance, work opportunities, and mentorship will enjoy a competitive advantage over passive workers. It will not be enough to work simply on merit—workers themselves are individual brands that must be recognized through appropriate networks to gain continued employment. Workers who adopt an entrepreneurial mindset will be open to developing new skills to differentiate themselves in the marketplace of work. In addition to skill development, workers must be adept at marketing their talents and what they have to offer through professional social media and other tools. Today’s students can adopt this mindset by understanding the workforce they are entering into and developing a skill set accordingly. Students should be focused on developing a professional network *during* their academic careers before they enter the world of work, which can be achieved through college-sponsored networking events and developing an online presence, such as a LinkedIn profile. Students should consider taking an entrepreneurship class no matter their career aspirations to learn how to develop entrepreneurial mindsets, which can be adapted to intrapreneurship within established organizations.

Analysis/Solution Mindset: Because many jobs will be automated or outsourced, 21st Century workers with superior analytical skills and a solutions-based mindset will excel in the new world of work. Analytical skills will include statistical analysis, quantitative reasoning, and the ability to sort through big data to arrive at conclusions that will create value. A solutions mindset will involve workers taking in all factors in a situation, including the human and emotional factors, which might be missed in automated processes. Students can develop these skills through experiential learning opportunities, which require problem solving while considering the human factor in situations. Analysis/solution mindsets are integral to the growing field of Design Thinking and many STEM careers, so curriculum incorporating ideation and building will help prepare students for 21st Century careers.

Deliverables and Best Practices

After establishing the list of ten 21st Century Skills based on the results of the three skills panels, the Feather River College CTE/EWD Team developed curriculum and activities to provide students opportunities to prepare for the New World of Work. These resources and ideas are available to share with interested community colleges across California.

Experiential Learning Program: The CTE/EWD New World of Work program at Feather River College has developed a project based learning course to provide experiential learning opportunities to students from all academic disciplines. Students can choose from one of four tracks: social entrepreneurship projects through the student group Enactus (formally SIFE), work based learning through internship placements on and off campus, virtual project work through online internships, or mentor-mentee pairings to promote succession planning within local communities. Students must complete a combination of project hours and in-class sessions that focus on building “Top 10” 21st Century Skills. Lessons related to 21st Century skills, student self-assessments, and the feedback of site supervisors hosting students have become such successful aspects of the program they are being adopted by partner colleges including Shasta College. The CTE/EWD New World of Work Team at Feather River College is currently exploring the possibility of creating assessments for 21st Century Skills that could correlate to an online badging system. This would allow students in the experiential learning course to earn badges for 21st Century skill attainment, which they could showcase to potential employers through personal websites, blogs, LinkedIn, etc. <http://www.newworldofwork.org>

21st Century Skills Modules: The 21st Century Skills Lesson Modules developed for project-based learning could be easily incorporated into other curricula. Some of the module content includes:

- Video Shorts: Developed through a collaborative with CreatorUp, an online web series school, these videos show comical “what not to do” scenarios for each of the “Top 10” 21st Century Skills. The shorts can be played during lessons to create a pop-culture interest for students and to launch conversation around proper workforce skills. All shorts are open-content and available for educator use. <http://www.youtube.com/playlist?list=PLAyCpxLR2TxsPkQeEA2UTVZLqKxU1hhzP>
- Keirsey Temperament Assessments and Debriefs: This assessment teaches self-awareness and how to work with people of other personality types. The Keirsey assessment is the foundation of several lessons and grounds students in their goals for the class and their future work life.
- Communication Assessments: Students learn about their predominant communication style as well as the styles of their peers. This allows students to

capitalize on their ability to adapt to suit varying styles with the goal of achieving productive communication in the workplace.

- **Collaboration & Virtual Collaboration:** Many projects require collaboration with site supervisors and key stakeholders. Enactus students in particular practice virtual collaboration through video conferencing, conference calls, and collaborative project management software, especially for international projects. All students take the Gallup StrengthsQuest assessment so they are able to identify the core skills they possess and how to best utilize these skills within a collaborative work team.
- **LinkedIn Profiles:** Students in the experiential learning course are required to complete LinkedIn Profiles, which exposes them to digital tools and allows them to take a proactive position on their digital professional presence before finishing college. Recently, international search strategies have been incorporated into the LinkedIn modules.

Entrepreneurial Mindset through Gamification: In partnership with Entrepreneurial Skills Panel contributor Zef Neemuchwala from Yellow Sequoia, Inc., development has begun for entrepreneurship simulations that can be incorporated into existing classes. Mr. Neemuchwala has enlisted the feedback of Amy Schulz and her entrepreneurship students to develop the beta of a web-based simulation. Several high school and college instructors from across northern California have agreed to pilot this program in Fall 2014 classes. Data will be collected on student learning outcomes and student engagement from the pilot. <http://www.yellowsequoia.com>

Virtual Entrepreneurship with SamaUSA: Tess Posner, Director of SamaUSA, contributed to the Entrepreneurial Skills Panel, and in collaboration with Amy Schulz, helped bring the virtual entrepreneurship program to Feather River College. SamaUSA trains low income college students on how to become independent contractors and freelancers through online work platforms. SamaUSA agreed to partner on this project at Feather River College, and the first pilot course for academic credit is currently underway to train rural students in these skills. Not only will students have the opportunity to earn income, but they will also be developing skills, such as digital literacy, virtual collaboration, and entrepreneurial mindset, that they can use in their future work lives. <http://samasource.org/samausa/>

Entrepreneurship Pathway: In partnership with Plumas Unified School District, an entrepreneurship pathway has been implemented at four local high schools. Students participate in a 7-week entrepreneurship unit with their senior project class, *Business & Finance*. Students develop their own business concepts, which culminates in a team-based business plan competition. Finalists present their concepts at the county-wide Plumas Business Summit. This course is a district-wide graduation requirement, ensuring all graduates of Plumas Unified School District receive introductory

entrepreneurship education. In addition, students can focus their plans and roles on their own strengths, which are determined through self-awareness activities, such as the Keirsey Temperament Assessment. Entrepreneur guest speakers, many of whom are part of the entrepreneurship awareness group Empact, address the students at kick-off events. www.iempact.com

STEAM Fair: In May 2014, the CTE/EWD Program at Feather River College is partnering with the San Francisco based design education group, KidMob, to host a STEAM (Science, Technology, Engineering, Arts, and Math) Fair for eighth grade students from five local area schools. Students will engage in hands on learning activities to promote design thinking while learning more about the academic and career paths related to STEAM. KidMob will host professional development training sessions before and after the event to support lead educators from each school in using 3-D Printing equipment and incorporating design thinking into their Common Core curriculum. <http://kidmob.org>

Partnering and Resources

If you are interested in joining the New World of Work movement and would like to find out more about available resources, please contact the Skills Panel Team:

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Terry Allen, Culinary Arts
Joyce Clare, Nursing
Lauri Levy, Administration of Justice
Brian Holbrook, Administration of Justice
Shannon Brandes, Digital Technology
Ricardo Archundia, Criminal Justice
Julie Murphy, Business
Caroline Correia, Nursing
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Rural Panel

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