**Strong Workforce Program – Work-Based Learning and Job Placement Workgroup**

**Glossary of Core Competencies & 21st Century Skills**

Each of the 10 community colleges in San Diego and Imperial Counties has identified core competencies that graduating students are expected to have mastered. The competencies cited as “core” vary only slightly form one institution to another and vary only slightly from the 21st century skills cited by universities and employers as critical to student success. The list of competencies/skills included in the Core Competencies & 21st Century Skills regional survey is a combination of core competencies identified by the 10 community colleges in Region 10, the New World of Work, and the National Association of Colleges and Employers.

Below is a glossary of the core competencies and 21st century skills identified to guide the completion of the survey, with the understanding that other definitions may be available.

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| **Core Competency / 21st Century Skill**  | **Definition** |
| Adaptability\* | 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.  |
| Aesthetic awareness | Aesthetic awareness is both a process and a product that allows learning to become aesthetically knowledgeable, or allows the learner to be open to engaging in aesthetic experiences. (Aesthetic Development in Higher Education: An Interdisciplinary Dialogue, 2011) An understanding of aesthetics and the ability to manipulate form is intrinsic to producing two and three dimensional imagery, whether in the context of product, print, architecture, and so on, and is therefore critical to any design curriculum. (Miller, M. & Reid, A., 2005)  |
| Collaboration\* | 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 www.newworldofwork.org 14 group work, through service learning projects uniting diverse groups, and in extracurricular organizations. Virtual collaboration, such as video conferencing and virtual project management, can be integrated into distance education courses. |
| Communication\* | 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.  |
| Creative thinking | Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.  (Association of American Colleges & Universities Creative Thinking Value Rubric. See <http://miracosta.edu/governance/oac/slo.html>and [www.aacu.org](http://www.aacu.org/).) |
| Critical thinking | Critical Thinking: Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.  (Association of American Colleges & Universities Critical Thinking Value Rubric. See <http://miracosta.edu/governance/oac/slo.html> and [www.aacu.org](http://www.aacu.org/).) |
| Cultural competence/Global awareness\* | Cultural knowledge and competence is “a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts.” (Bennett, J. M., 2008, as quoted from the Association of American Colleges & Universities Intercultural Knowledge and Competence Value Rubric.  See <http://miracosta.edu/governance/deqcc/resources.html> and [www.aacu.org](http://www.aacu.org/).)Global Awareness includes: Using 21st century skills to understand and address global issues; learning from and working collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect and open dialogue in personal, work and community contexts; understanding other nations and cultures, including the use of non-English LanguagesPartnership for 21st Century Skills (P21). (2009). *Framework definitions*. http://www.p21.org/storage/documents/P21\_Framework\_Definitions.pdfFramed as “Social/Diversity Awareness” in the New World of Work framework: 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. |
| Education and career navigation skills | Navigating the world of higher education: The practical knowledge and skills required to enroll and succeed in postsecondary education, including: * Knowledge of admission requirements and financial aid processes
* Understanding protocols for contacting professors and working in study groups
* Ability to navigate a postsecondary education campus (both physical and virtual) and understand school culture (Conley 2009)

Navigating the world of work: The practical knowledge and skills required to explore career options, obtain employment, and manage one’s career. Includes: * Career research and exploration skills
* Resume-writing and interview skills
* Understanding the protocols for interacting with supervisors and colleagues
* Ability to navigate the physical or virtual workplace, including understanding the functions of various departments and how to access information
* Understanding organizational culture
* Understanding of how to advance in a career within specific industries and pathways (NCDG 2003; Bailey, Hughes, & Moore 2004)

(ConnectEd (2012) College and Career Readiness: What do We Mean?) |
| Empathy\* | 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. |
| Entrepreneurial mindset\* | 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.  |
| Environmental awareness | Environmental Literacy includes the following components:* Demonstrate knowledge and understanding of the environment and the circumstances and conditions affecting it, particularly as relates to air,

climate, land, food, energy, water and ecosystems* Demonstrate knowledge and understanding of society’s impact on the

natural world (e.g., population growth, population development, resourceconsumption rate, etc.)* Investigate and analyze environmental issues, and make accurate

conclusions about effective solutions* Take individual and collective action towards addressing environmental

challenges (e.g., participating in global actions, designing solutions thatinspire action on environmental issues)Partnership for 21st Century Skills (P21). (2009). *Framework definitions*. http://www.p21.org/storage/documents/P21\_Framework\_Definitions.pdf |
| Ethical reasoning and action | Ethical reasoning is reasoning about right and wrong human conduct.  It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions.  Students’ ethical self-identify evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.  (Association of American Colleges & Universities Oral Communication Value Rubric. See <http://miracosta.edu/governance/oac/slo.html> and [www.aacu.org](http://www.aacu.org/).) |
| Information literacy / Digital fluency\* | 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.  |
| Leadership | Leadership refers not to one’s role or job title, but to a combination of interpersonal skills and qualities one possesses that inspire and motivate others to find better ways of accomplishing goals and of seeking resolutions to problems; this type of leadership is referred to as transformational leadership.  (See <http://online.stu.edu/transformational-leadership/>). |
| Learning skills and metacognition | Learning skills and metacognition include the following concepts:* Understanding and applying strategies for learning, including individual and organizational self-assessment (SCANS 1991; Binkley et al. 2010; Carnevale & Desrochers 2003; Conley 2011)
* Applying and adapting new knowledge and skills in both familiar and changing situations, using learning theory such as personal learning styles (visual, aural, etc.), formal learning strategies (note taking or clustering items that share characteristics), and informal learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions). (SCANS 1991, p. 33) Related to this, “integrative learning” is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.  (Quoted from the Association of American Colleges & Universities Integrative Learning Value Rubric. See <http://miracosta.edu/governance/oac/slo.html> and [www.aacu.org](http://www.aacu.org/).)
* Involves self-awareness, the ability to dedicate time to learning, autonomy, discipline, perseverance, and information management in the learning process; the ability to concentrate for extended and short periods of time; the ability to reflect critically on the object and purpose of learning; the ability to communicate as part of the learning process (Binkley et al. 2010, p.20)
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| Personal responsibility / Self-management | Personal responsibility/self-management includes the set of skills enabling individuals to appropriately plan, execute, and complete their own work, as required in both postsecondary and workplace settings. Includes the ability to: * Set goals
* Establish priorities
* Manage time
* Study alone and in groups
* Execute tasks with precision and accuracy
* Persist
* Take initiative and direct one’s own efforts
* Tackle obstacles resourcefully
* Complete tasks and projects (Conley 2009; Kyllonen 2008; Conference Board 2006)

In the Association of American Colleges and Universities Liberal Education and America’s Promise (LEAP) initiative, the following are **dimensions of “Personal and Social Responsibility” together with “Contributing to the larger community”, “Taking seriously the perspective of others”, and “Developing competence in ethical and moral reasoning and action”, which are covered elsewhere in this glossary.** * **Striving for excellence**: developing a strong work ethic and consciously doing one’s very best in all aspects of college
* **Cultivating personal and academic integrity**: recognizing and acting on a sense of honor, ranging from honesty in relationships to principled engagement with a formal academic honors code
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| Problem-solving\* | Problem Solving:  Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.  (Association of American Colleges & Universities Problem Solving Value Rubric. See <http://miracosta.edu/governance/oac/slo.html>and [www.aacu.org](http://www.aacu.org/).) Related to critical thinking and problem-solving is having and “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.  |
| Resilience \*/ Grit | 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. |
| Self-awareness\* | 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 responsibility | Social responsibility, together with personal responsibility, is considered to be a cornerstone of a liberal education. The Association of American Colleges and Universities, in its LEAP initiative, lists “**Contributing to a larger community**: recognizing and acting on one’s responsibility to the educational community and the wider society, locally, nationally, and globally” as one of five dimension of Personal and Social Responsibility. Civic engagement is a means to enact social responsibility. In the business world, “corporate social responsibility” aims to encourage companies to be more aware of the impact of their business on the rest of society, including their own stakeholders and the environment. (Financial Times) |

\*21st Century skills identified by the New World of Work initiative of the California Community Colleges. See Schulz, A. & Gill, R., (2014) *New World of Work Community Colleges and 21st Century Skills: Skills Panels to Assist Student Career Success*.