



## A VISION FOR WW-P: COMPETENCIES FOR 21<sup>ST</sup> CENTURY LEARNERS

---

*The rigor that matters most for the 21<sup>st</sup> century is demonstrated mastery of the core competencies for work, citizenship, and life-long learning. Studying academic content is the means for developing competencies, instead of being the goal, as it has been traditionally. In today's world, it's no longer how much you know that matters; it's what you can do with what you know.*      -- Tony Wagner, "The Global Achievement Gap"

In 1899, educator John Dewey wrote, "Relate the school to life, and all studies are of necessity correlated." Now, more than ever, modern life requires students to take what they learn in school and apply it at home, at work, in their communities, and in future academic pursuits. Today's research indicates that students are more successful at 'transferring' knowledge when, as Dewey noted, instruction explicitly emphasizes a real-world context. If we are to remain true to Dewey's statement, we must prepare students by creating learning environments that force students to draw upon multiple knowledge domains to find solutions. Hence, if modern-day students are to be prepared to succeed in this world, public educators must prepare students in a new way.

There is ample evidence all around us of the many changes the 21st century has brought to our lives. WW-P believes that to prepare our students for the world of tomorrow, we must enhance today's learning environments. The outcomes we want for our students are not new to the 21<sup>st</sup> century. Instead, they express knowledge and skills that are essential for life in the 21st century. Reflecting time-honored skills, taught via proved learning methods, and supported by modern learning tools, processes, and environments, the WW-P 21<sup>st</sup> Century Competencies unite these elements into a coherent set of educational objectives to ensure that all students are prepared for success.

### 21<sup>ST</sup> CENTURY COMPETENCIES

A 21st century education must be founded on the solid ground of content knowledge. Hence, core content subjects are the groundwork of the WW-P competency framework. WW-P will build upon this foundation with its six competencies: Collaborative Team Member; Effective Communicator; Globally Aware, Active, and Responsible Student/Citizen; Information Literate Researcher; Innovative and Practical Problem Solver; and Self-Directed Learner. A study of each of these competences allows us to reflect upon their individual and collective importance.

**Collaborative Team Member.** Experience and research confirm that students who work together cooperatively show dramatic increases in academic achievement, self-esteem, and positive social skills. The capacity to innovate is increasingly linked to the ability to connect with others, and with the facility to communicate and collaborate. In our global age, students need to work with and learn from diverse groups, be flexible in a variety of work and social settings, and be adaptable to changing times. They need to demonstrate leadership and take responsibility for results, show initiative and resourcefulness, and be productive and accountable for their actions. Collaboration

skills are especially critical in the expanding service economy – estimated to be 81 percent of jobs by 2014 – where relationships with customers and fellow employees are of vital importance.

Today, open source programs, wikis, blogs, and other web 2.0 technologies enable individuals divided by space and time to collaborate. Successful problem solving in the 21st century requires us to work effectively and creatively with computers, with vast amounts of information, with ambiguous situations, and with other people, and being able to collaborate within and across multiple teams will be more critical than ever as our students move forward.

**Effective Communicator.** Expressing thoughts clearly, articulating opinions, motivating others, and communicating coherent instructions are valued skills, and will continue to grow in importance. Complex communication skills involve explanation, negotiation, and other forms of intense human interaction, and these skills play a vital role in global employment. In addition, students must learn to consider and understand how words and images are shaped by today's technologies, as so many of our messages are mediated by one or more digital devices; communication skills are intertwined with students becoming information, media, and technology literate.

**Information Literate Researcher.** Information literacy is a set of abilities requiring individuals to recognize when information is needed and to have the ability to locate, evaluate, and effectively use the information. Information literacy is increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Interestingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability; we live in a world where anyone can publish an opinion or perspective, and have that opinion amplified within the information marketplace. At the same time, Americans have unprecedented access to the diverse and independent sources of information, as well as institutions such as libraries and universities. The sheer abundance of information will not in itself create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively. Therefore, it is important that our students are given the tools required to take advantage of the information available to them. Information literacy forms the basis for lifelong learning and enables learners to master content and extend investigations, become more self-directed, and assume greater control over learning.

**Innovative and Practical Problem Solver.** Successful people solve problems by engaging in planning, identifying specific goals, and designing strategies and solutions. Solving modern-day problems demands a full range of critical thinking, innovation, and creativity skills. Problem solving is the process of applying the scientific and engineering methods of defining and describing a problem, generating potential solutions, and implementing, monitoring, and evaluating the effectiveness of the selected intervention.

It is important to recognize that problem solving encompasses a specific set of skills. To successfully solve a problem, students first must be able to formulate a problem – that is, understand what makes up a problem's essential elements. Thus, critical thinking skills are vital and indispensable. Students also must possess a sense of what resources and strategies are needed to solve a problem; this implies skills in information literacy, of being able to sort through data to extract relevant information. Students must be able to effectively and efficiently apply appropriate tools and techniques to the problem, and have the persistence and tolerance to keep searching for a solution if initial attempts are unsuccessful. This suggests that flexibility and self-direction are critical to problem solving. Finally, students need to know how to reach out to others to tap their expertise to solve the complex problems, which requires effective communication and collaboration.

The ability to be innovative and creative in problem solving is becoming the most important requirement for personal and professional success. Creativity thrives on freedom to take risks and learn from one's mistakes. Innovation keeps the creative spark alive and makes it useful to the wider world. Robert Sternberg, of Tufts University, described successful individuals as those who have "creative skills, to produce a vision for how they intend to make the world a better place for everyone; analytical intellectual skills, to assess their vision and those of others; practical intellectual skills, to carry out their vision and persuade people of its value; and wisdom, to ensure that their vision is not a selfish one."

**Globally Aware, Active, and Responsible Student/Citizen.** The 21<sup>st</sup> century has seen the world "flatten" through travel, high-speed data transfer, and instant communication technologies. Such changes bring great opportunities, but only if graduates can function within an ever-changing global job market. Employers from agriculture to industrial businesses are searching for employees who have the necessary cultural understanding, technical and problem solving skills, and linguistic knowledge of the global community to work effectively with people and businesses in countries around the world.

Getting to know people in other parts of the world through communication, commerce, and culture creates understanding as well as respect. The health of every community, small and large, is strengthened as students learn to see issues through the eyes of others. Students need genuine experiences living, studying, and working within cultures different from their own. Moreover, as students learn other languages beginning in elementary school, they gain keys for global understanding, future jobs, and influence within a broader global community.

To address the challenges of preparing students to be citizens, workers, and leaders in the interconnected world of the 21<sup>st</sup> century, WW-P seeks to integrate a "global" education into the current curriculum. Teaching a "globalized curriculum" requires drawing upon modern real-world contexts and presupposes an interdisciplinary approach. By their very nature, current issues and problems draw upon multiple forms of expertise that will enable students to better see the relationship between subject knowledge and the world around them. This will help students see the essential connections between bodies of knowledge, and more fluently synthesize disparate domains. Through this approach, we hope to create global citizens who demonstrate an awareness of the world around them, who feel a sense of responsibility, and can advocate and take action to make a community (local, national, or global) a better place.

**Self-Directed Learner.** Learning does not stop at the end of the school day or the end of the school year. Learning is, and must be, a lifelong pursuit. The rapidity of change, the relentless advance of technology, the diminishing half-life of knowledge, and the far-reaching effects of globalization are all factors that contribute to a growing understanding that the most valuable lesson we can teach our students is "how they can teach themselves."

As educators, we nurture student self-direction and motivation, and we provide students with opportunities before, during, and after instruction to exercise some control of their own learning. This does not mean students make all the decisions but it does require that we teach and engage students in specific strategies that offer them opportunities to make decisions and solve problems without being told what to do at all times. We must help students become reflective about thinking and learning, and provide strategies to help them process information effectively and to be self-confident, engendering a belief that they have the abilities to succeed.

## CONCLUSION

Our students must be prepared to succeed in this world, and we must prepare students in a new way. Together, we must master an understanding of the global world. The success of our students is dependent on our ability to teach them the 21<sup>st</sup> century competencies.

## SOURCES

\*Above rationales adapted from the following sources:

Association of College and Research Libraries

<http://www.ala.org/ala/mgrps/divs/acrl/issues/infolit/index.cfm>

Heidi Hayes Jacobs – What Learning is Needed for the 21<sup>st</sup> Century?

[http://www.21stcenturyskills.org/route21/images/stories/epapers/skills\\_foundations\\_final.pdf](http://www.21stcenturyskills.org/route21/images/stories/epapers/skills_foundations_final.pdf)

NCREL: Critical Issue: Working Toward Student Self-Direction and Personal Efficacy as Educational Goals

<http://www.ncrel.org/sdrs/areas/issues/students/learning/lr200.htm>

Tony Wagner *The Global Achievement Gap: Why Even Our Best Schools Don't Teach The New Survival Skills Our Children Need--and What We Can Do About It*

White House Proclamation for National Information Literacy Awareness Month, October 2009

[http://www.whitehouse.gov/the\\_press\\_office/Presidential-Proclamation-National-Information-Literacy-Awareness-Month/](http://www.whitehouse.gov/the_press_office/Presidential-Proclamation-National-Information-Literacy-Awareness-Month/)

Strategies for Achieving Wisconsin Department of Public Instruction for Wisconsin Students

<http://dpi.wi.gov/cal/pdf/global-litbrochure.pdf>