

## 21<sup>st</sup> Century Knowledge, Skills, and Abilities: A Representative Summary

1. Mastery of Core Academic Subjects: English, reading, or language arts; mathematics; science; foreign languages; civics; government; economics; arts; history; and geography. NOTE: The so-called STEM disciplines—science, technology, engineering, and mathematics—comprise a special priority.
2. 21<sup>st</sup> Century Content
  - Global awareness
  - Financial, economic, business and entrepreneurial literacy
  - Civic literacy
  - Health and wellness awareness and literacy
3. Learning and Thinking Skills
  - Critical thinking and problem-solving skills
  - Communication skills
  - Creativity and innovation skills
  - Contextual learning skills
  - Information and media literacy skills
4. Information and Computer Technology Literacy
  - Know how to use technology to learn core content and skills
  - Know how to use technology to learn how to learn, think critically, solve problems, use information, communicate, innovate, and collaborate
5. Life Skills
  - Leadership
  - Ethics
  - Accountability
  - Adaptability
  - Personal responsibility
  - People skills
  - Self-direction
  - Social responsibility
6. Initiative
  - Students are able to start, complete, and demonstrate the results of projects they select and undertake
  - Students are able to do projects and solve problems with minimal, compliance-oriented supervision
7. Group and Team Work
  - Students are able to work in teams to solve problems and complete projects
  - Students know how to resolve differences and mediate conflicts with other group and team members
  - Students value and know how to benefit from diverse pathways to the same projects and problems
8. Preparation for Future Learning

- Students learn assessment skills for self-directed learning and decision-making.
- Students learn “meta-cognitive skills”—how to check on how they think and learn— together with ways to reframe problems, change thinking and language, and gain new knowledge and understanding

Such an inventory for knowledge, skills, abilities, sensitivities, and ethics is just the beginning for school restructuring. ***Unprecedented numbers of students of all ages need advanced mastery, which is typically achieved through successful completion of postsecondary education.*** Postsecondary education includes adult vocational-technical training institutes as well as community colleges, four-year colleges, and universities.

### Exemplary Sources

Casner-Lotto, J., & Benner, M. (2006). *Are they really ready for work? Employers' perspectives on the basic knowledge and applied skills of new entrants into the 21<sup>st</sup> Century workforce.* New York: The Conference Board, Inc., the Partnership for 21<sup>st</sup> Century Skills, Corporate Voices for Working Families, & the Society for Human Resource Management.

National Center for Education and the Economy. (2007). *Tough choices or tough times: The report of the new commission on the skills of the American workforce.* San Francisco: Jossey-Bass Wiley imprint.

National Governors Association, Council of Chief State School Officers, & Achieve, INC. (2008). *Benchmarking for success: Ensuring U.S. students receive a world-class education.* Washington, DC: Author.

Partnership for 21<sup>st</sup> Century Skills. (2007). *Learning for the 21<sup>st</sup> Century.* Tucson, AZ: Author.

### Four Important Contrasts for Partnership Leaders

- Industrial age systems emphasized *efficiency in processing and instructing students*; today's systems emphasize *effectiveness as indicated by outcomes*
- Industrial age systems gave immediate credibility and legitimacy to *credentials, diplomas, and certificates*; today's systems also demand *demonstrated proficiency, competence, and advanced mastery*
- Industrial systems prepared students to *fill jobs*; today's systems also prepare learners to *create new jobs, careers, businesses, and public sector organizations.*
- Industrial age systems emphasized *training-as-direct instruction* during the school day and inside the school's walls; today's systems also emphasize learning systems, especially *anytime, anywhere, self-directed learning technologies and abilities*, which ideally are connected to classrooms to support both teachers and students.

### Two Important Reminders for Partnership Leaders

- Preparation for democratic citizenship and contributive civic engagement has been a core mission for schools. Beware school reform initiatives that focus only on jobs, vocationalism, and narrow economic development because they endanger this mission.
- Although schools can make significant contributions to workforce development and overall economic development, beware of policies and advocacy platforms that make schools both the root cause of the economic problem and the only viable solution.