

# A Brief Survey of the Concept of 21st Century Skills

## Agents and Assessments

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Education | Evolving

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*What are considered "21st Century Skills?" Who has articulated them, and what sorts of assessment tools exist to measure them? What relationship does the NEA have to all of this?*

### **The role of the NEA in these discussions**

The National Education Administration is a founding member of the Partnership for 21st Century Skills, a group that declares itself the leading advocacy organization infusing 21st century skills into education. It is unclear whether they coined this term, "21st Century Skills," or simply brought it to the foreground.

The Partnership states that America's schools are slipping in global competitiveness, especially when considering those competencies that are/will be needed to thrive in a 21st century world. The Partnership puts forward a charge to business, government, and educational groups to develop new modes of assessment to gauge the need for, and effectiveness of, new approaches to curriculum and pedagogy.

There is a profound gap, the Partnership states in its mission, between the knowledge and skills most students learn in school and the knowledge and skills required 21st century communities and workplaces. They argue classrooms need to become more relevant to the real world, and this happens by incorporating 21st Century Skills.

The NEA helps to facilitate relationships between the Partnership and education, government, and business leaders at the state and national levels. Strong state-level initiatives are underway in North Carolina, West Virginia, Wisconsin, and South Dakota. These focus on the development and implementation and assessment of programs that align with the skills (see below), both on the end of the teacher and the learner.

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### **Varying definitions of 21st Century Skills**

The Partnership for 21st Century Skills is unique in the enormity of its scope and infrastructure. There are other organizations though that have articulated their own ideas of what is necessary for students to learn for the information age. We can see overlap with many of these.

### The Partnership for 21st Century Skills

- Core subjects, as defined by NCLB
- 21st century content: global awareness; financial, economic, business and entrepreneurial literacy; civic literacy; and health and wellness awareness
- Learning and thinking skills: critical thinking and problem solving skills, communications skills, creativity and innovation skills, collaboration skills, contextual learning skills and information and media literacy skills
- Information, Communications and Technology (ICT) literacy
- Life skills: leadership, ethics, accountability, adaptability, personal productivity, personal responsibility, people skills, self-direction, and social responsibility

### North Central Regional Education Laboratory (NCREL)

- Digital age literacy
- Inventive thinking
- Effective communication
- High productivity

### Educational Testing Service

- Such skills mark the ability to:
  - o Collect and/or retrieve information
  - o Organize, manage, interpret, and present information
  - o Evaluate the quality, relevance, and usefulness of information
  - o Generate accurate information through the use of existing resources

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### Assessment

The duo of the NEA and **Partnership for 21st Century Skills** lead discussion here, with other organizations reporting on them. They recommend "moving beyond standardized testing as the sole measure of student learning," by balancing traditional tests with classroom assessments, and using technology-based assessments to deliver immediate feedback.

On the current state of assessment for some of the Skills mentioned above, they offer the following lay-of-the-land:

- *Assessment of Global Awareness*: Currently limited to the National Assessment of Educational Progress (NAEP), and the Geography Assessment and Intermediate Level Geography Test.
- *Civic Engagement*: Eleven states do have some sort of quantified assessment. In the last four years, the Center for Information and Research on Civic Learning and Engagement (CIRCLE) at the University of Maryland's School of Public Policy has tried developing more universal indicators of student achievement.
- *Financial, Economic, and Business Literacy*: No Child Left Behind is developing a National Assessment of Educational Progress (NAEP) test, and there are some opt-in economics tests available.

- *ICT Literacy*: The Key Stage 3 (age 12-13) ICT Literacy Assessment was recently created by the British Qualifications and Curriculum Authority (QCA) to assess both content-area and thinking skills. Microsoft and The International Society for Technology in Education (ISTE) are trying to develop something similar for 8th grade, presumably for use in the United States and perhaps abroad. ETS also offers a test, mentioned below.

Another sort of assessment is mentioned by the Partnership as showing promise:

- The Collegiate Learning Assessment (CLA), developed by the Council for Aid to Education, employs open-ended questions and hypothetical situations to test a student's critical thinking, analytic-reasoning, and written skills. It has been used at the college level, and a high school version is currently being piloted.

The **International Society for Technology in Education** has come up with a set of standards by which to define technology proficiency. They want to jump beyond expectations of competency and provide guides for how students can be trained to innovate with their tech skills. The standards are organized into six categories:

1. Creativity and innovation
2. Communication and collaboration
3. Research and information retrieval
4. Critical thinking, problem solving, and decision making
5. Digital citizenship
6. Technology operations and concepts

The **Educational Testing Service** (ETS) has created a scenario-based assessment to measure cognitive skills in a technological environment. It is called iSkills, the "Information and Communication Technology (ICT) Literacy Test." The test requires students to use critical thinking skill to tie together technology in a manner to solve problems. There are two levels, with the Core Level being for students in high school and beginning college; the Advanced Level is for rising college juniors and those transferring from a two-year school to a four-year.

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### **Pearson Assessments in Minnesota**

In March of 2006 Pearson Education combined three separate assessment businesses under the title of Pearson Assessments, including one that had already bore that name, Pearson NCS (which included, among others, services for government and education), and the assessment branch of AGS Publishing. All three of these businesses were located in Minnesota, and Pearson will continue to run their services out of facilities in Minnesota's metropolitan cities of Bloomington, Eagan, and Shoreview.

Pearson offers customized assessments, and those geared towards the measurement of state standards. None seem to jump out as overtly targeted at 21<sup>st</sup> Century Skills.

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