

# *Contemporary Literacy Skills Global Initiatives Converge*

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**Basic Literacy - Literacy Skills - Technology Literacy -  
Computer Literacy - Digital Literacy - Information Literacy -  
Media Literacy - Visual Literacy - ICT Literacy - Learning Skills -  
Twenty-First-Century Skills - Inventive Thinking - Problem Solving Skills -  
Decision Making Skills - Critical Thinking Skills - et al**

**Executive Summary:** *Contemporary Literacy Skills* looks at many literacy skills that have been promoted in curriculum and learning objectives over the last two decades. They have many names, but what do they have in common? These skills are demanded by the 21<sup>st</sup> century workplace, and ICT literacy is becoming recognized by a wide range of global stakeholders, including K-12 education, postsecondary education, and business and government leaders. Developing a common language and building strong collaborations are equally important to achieving success in teaching these skills.

Recently, I was thinking about clarifying the differences between information literacy skills and other skills that are receiving so much attention lately. As I looked at some of the current references and documents, I began to realize I needed a glossary to sort through the various terms used to describe curriculum and learning objectives for education and the workplace. Economic forecasts of the skills required for the twenty-first-century workplace have bred a variety of synonyms for what I will call “contemporary literacy skills.” A closer look at promotion of these Digital Age skills reveals many advocates and almost as many publications. This narrative looks at these common skills-however they are named-in twenty-one selected documents<sup>1</sup> and initiatives, and concludes with a call for collaboration among proponents in order to achieve high levels of learning for K-20 and beyond. (See the accompanying graphic perspective of fourteen of these documents.)

## **Definitions of Literacy**

North Central Regional Education Laboratory (NCREL), 21st Century Skills, enGauge,  
[www.ncrel.org/engauge/skills/agelit.htm](http://www.ncrel.org/engauge/skills/agelit.htm)

North Central Regional Education Laboratory (NCREL), Smart Library on Literacy and  
Technology,  
[www.ncrel.literacy.smartlibrary.info/NewInterface/topics.cfm?room\\_id=10007&topic=1169](http://www.ncrel.literacy.smartlibrary.info/NewInterface/topics.cfm?room_id=10007&topic=1169)

Information Inquiry for Teachers: The Evolving Definition of Literacy,  
<http://eduscapes.com/info/evolve.html>

## Basic Literacy

Originally basic literacy meant language proficiency and numeracy at levels necessary to function on the job and in society to achieve one's goals and to develop one's knowledge and potential.<sup>2</sup> In the early 1900s, basic literacy meant the ability to write one's name. That definition was later expanded to mean the decoding of text, and by the 1930s it had come to include reading and expressing oneself through writing.<sup>3</sup>

## Beyond Basic Literacy

The definition of basic literacy existed without change for nearly a century. Two decades ago the first report to equate computer science with traditional basic skills was *A Nation at Risk*.<sup>4</sup> Four years later ALA led the first national effort to address information literacy with the creation of the National Forum on Information Literacy, and soon after that, in 1989, the National Education Summit convened to recognize the demands that the global workplace had begun to place on education and training.<sup>5</sup> Congress subsequently passed the National Literacy Act of 1991 to voice national support for stronger and broader literacy skills for adults.<sup>6</sup> *What Work Requires of Schools: A SCANS Report for America 2000*, also published in 1991 and arguably the most well-known report, brought national focus to the needs of a high-performance workplace by requiring basic literacy skills as well as computational and thinking skills.<sup>7</sup>

## Information Literacy

The term “information literacy” was coined in the 1970s by library and information professionals; librarians readily chose “information literacy” over “library literacy.” With the emergence of information technologies in the 1980s, it became an acceptable education term.<sup>8</sup> *Information Power* advanced the first standards: the Nine Information Literacy Standards for Student Learning.<sup>9</sup>

### National Information Literacy Standards for Student Learning

For a good description of how the National Information Literacy Standards for Student Learning were developed, check out this Web site:

<http://www.ncrel.literacy.smartlibrary.info/NewInterface/segment.cfm?segment=2361>

Promotion of these information literacy skills, which are defined in three categories—information literacy, independent learning, and social responsibility—has repeatedly been documented to have a positive impact on curriculum and student achievement in schools that have strong library media programs.<sup>10</sup> For well over a decade the components of the Nine Information Literacy Standards have been integrated into instruction in schools nationwide. Some states have correlated the standards with state curriculum standards and assessment. The current issue of *NewsWire* takes a close look at the correlation of these standards with state standards in six southeastern states.<sup>11</sup>

## **Technology Literacy**

In 1998 the National Education Technology Standards for Students (NETS for Students), published by the International Society for Technology in Education (ISTE), proposed a general set of profiles describing technology literate K-12 students.<sup>12</sup> While some states have used NETS for Students as models for developing technology integration standards correlated with state curriculum standards, more often they use these standards to focus on acquiring and developing skills using technology tools rather than using the tools to acquire learning skills. Promotion of technology literacy has been largely the responsibility of technology departments in states' departments of education. The lack of collaboration with curriculum and instruction leaders has probably been the main reason that implementation of NETS for Students-which includes literacy standards-has focused too narrowly on tool use and lacked the punch for integrating information literacy. It should be noted that ISTE does provide reliable curriculum resources that focus on using literacy skills, and it is a key player in the (ICT) literacy movement described below.

## **Beyond Technology Literacy-Twenty-First- Century Skills**

Similar to the SCANS Report, the 2001 CEO Forum's Year 4 STaR Report outlined a full range of twenty-first-century skills under three categories: Digital Age literacy, inventive thinking, and effective communication.<sup>13</sup> Component skills include higher-order thinking skills, personal and social responsibility, and visual and information literacy, clearly echoing those skills enumerated in the Nine Information Literacy Standards and such subsequent reports as Learning for the 21st Century (discussed later).

No Child Left Behind (NCLB) was crafted almost twenty years after the first mention of computer science as a basic literacy requirement in *A Nation at Risk*.<sup>14</sup> This legislation includes the recommendation that by the eighth grade all students should be technologically literate.<sup>15</sup> It promotes improving literacy skills and academic achievement by providing students access to well-equipped, technologically advanced school library media centers and well-trained, professionally certified school library media specialists (SLMSs).<sup>16</sup> While NCLB identifies the core academic subjects as English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history and geography, it only requires "adequate yearly progress" (AYP) accountability results (satisfied by criteria established by each state) in mathematics and reading. Considerable debate has ensued within the education community about tying success or failure only to mathematics and reading scores. Many educators maintain that a broader, more complex set of skills are needed by students preparing for the real world, but the U. S. Department of Education claims that these twenty-first-century skills can and should coexist within the accountability requirement.<sup>17</sup> It is left to state policy makers to understand these essential literacy skills and develop strategies for inclusion within the NCLB requirements.

Recently the Partnership for 21st Century Skills, a public-private organization formed in 2002, has begun to define and incorporate the skills that are necessary for every K-12 student's success in the twenty-first century. Emphasis in their publication, *Learning for*

*the 21st Century*, is on core subjects and learning skills “using 21st Century **tools** . . . to learn 21st Century **content** . . . in a 21st Century **context** . . . including 21st Century **assessments**. . . that measure 21st Century Skills.”<sup>18</sup> The partnership amplifies the term “learning skills” to include information and communication skills, thinking and problem-solving skills, and interpersonal and self-directional skills. The second component, “21st Century tools,” is defined as information and communication technologies (for example, computers, networks, audio, and video) and other media and multimedia tools. They equate these learning tools and skills to information and communication technologies (ICT) literacy. During the initiative's next phase, the Partnership will incorporate ICT literacy skills.

Since several of the preceding documents promote skills for K-12, postsecondary students, and adults, the recent emphasis on examining the broader K-20 environment provides a splendid opportunity for developing common goals. As such, an appropriate addition to this narrative is the latest Business- Higher Education Forum (BHEF) report sponsored by the American Council on Education.<sup>19</sup> Business leaders and members of the Partnership for 21<sup>st</sup> Century Skills staff identify a core set of skills that companies must require of university and college graduates: leadership, teamwork, problem solving, time management, self-management, adaptability, analytical thinking, global consciousness, and basic communications. Moving beyond an earlier report that confined itself to core information technology skills, the current document enumerates five key changes that can help redesign education and prepare graduates for the twenty-first century.

- focusing education on the lifelong learning skills and attributes needed for a nation of learners;
- creating content that is challenging, motivating, and relevant;
- encouraging learning through more interaction and individualization;
- increasing opportunities and access to education; and
- adapting objectives to specific outcomes and certifiable job-related skills.<sup>20</sup>

It is evident that, as they prepare students for competence in the global workplace, postsecondary educators are recognizing the need for the same literacy skills that have been previously identified by K-12 educators.

### **ICT Literacy/Digital Literacy**

ICT literacy is defined as using digital technology, communications tools, and networks to access, manage, integrate, evaluate, and create information to function in a knowledge society.<sup>21</sup> A global movement of business, education, and public policy stakeholders is united to advance universal ICT digital literacy. Several international ICT literacy summit conferences, including one scheduled for 2004, speak with a global voice about strengthening workforce readiness. A proposed framework for measuring ICT literacy, prepared by the International ICT Literacy Panel convened by Educational Testing Service (ETS) in 2001, defines “skills and knowledge required by students and adults as they complete secondary school, leave higher education, make career decisions or transitions, or function in everyday life in the 21st century.”<sup>22</sup> While a look at the

sponsors on the ICT literacy Web site suggests an emphasis on technology standards and certification through performance-based testing, a view of digital literacy beyond information technology, in which core subjects are connected to technical skills, appears in the resource links. In October 2003 it was announced that the development, application, and deployment of advanced technologies in education and training will be fostered by collaboration between the Department of Commerce and the Department of Education. A primary goal of their Interagency Working Group on Advanced Technologies for Education and Training is “development of advanced technologies for learning, and the development of digital libraries and learning resources.”<sup>23</sup> Although the working group will contribute to the development and implementation of the National Educational Technology Plan mandated by Congress, it remains unclear as to how the “advanced technologies for learning” will bring emphasis and focus to contemporary literacy skills.

### **Need for Collaboration**

After all this, perhaps you'll be surprised when I assert that contemporary literacies are not new at all. What has changed is the demand for skillful use of twenty-first-century tools, which have become valuable commodities in the contemporary global workplace. Reiterated, these tools are “information and communication technologies, such as computers, networking and other technologies and audio, video, and other media and multimedia tools.”<sup>24</sup> My analysis indicates, however, that what is missing is a clear definition of twenty-first-century skills with commonly agreed-upon terminology. You may ask: Will a common nomenclature advance contemporary literacy skills and goals more effectively than previous reform efforts? Does it make any difference?

“Until we can come together as a community and arrive at a definition of twenty-first-century literacy, it is going to be hard to pressure stakeholders into action.”-*John Bailey, Director of Technology, U. S. Department of Education* Wallace, Joy. [*Digital-equity Technology Literacy*]. 6 Feb. 2003, <http://lists.nici-c2.org/pipermail/digital-equity/2003-February/000005.html>. Accessed 2 Dec. 2004. (Removed from Web site.)

The answer lies in the brief history posed here-literacy skills have been in a holding pattern for over two decades. However, unlike the previous movements, ICT literacy is recognized by a wide range of global stakeholders, including K-12 education, postsecondary education, and business and government leaders. The leadership imperative is clear and, surely, the strategy for creating sustainable learning environments worldwide can be enhanced if key stakeholders can collaboratively articulate common definitions and implement common goals. Is this the shining moment for communicating these contemporary literacy goals in a common language among constituent groups? A unique and exciting thought! And SLMSs, who have been on this cutting edge of information literacy for a long time, are in an unrivaled position to move into leadership roles as these literacies become reality.

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