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This **DRAFT** Implementation Guide for 21st Century Skills Curriculum and Instruction is designed to help state leaders, policymakers, district leaders, school leaders understand the basic steps involved in implementing a 21st century skills initiative statewide. P21 is creating a brief, user-friendly guide for each of the P21 support systems:

1. Standards
2. Assessment
3. Professional Development
4. Curriculum & Instruction
5. Learning Environments

P21 is committed to an open and transparent process as we refine and finalize these implementation guides. We welcome any and all feedback on this working draft.

This draft is being shared in June, 2009 via the P21 Cybersummit and the P21 National Summit to solicit feedback from a wide audience. **Please consider sharing your thoughts on these questions:**

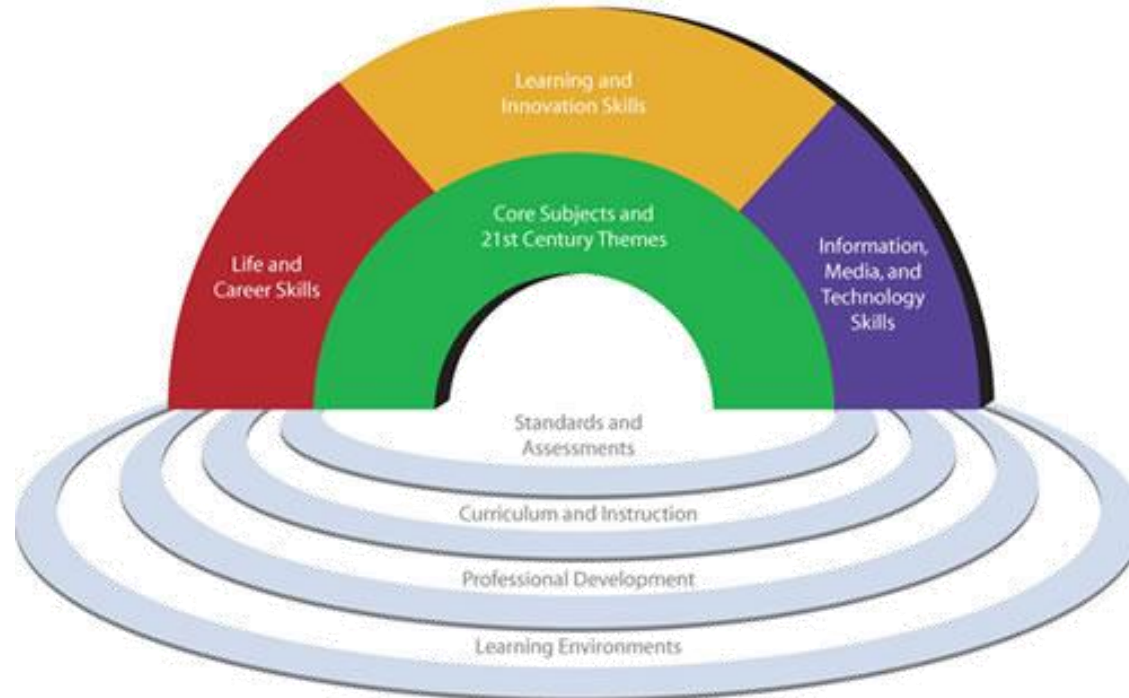
- 1. Is the vision (page 2) for curriculum, instruction and 21st century skills a compelling one? Why/Why not?**
- 2. Do the recommendations (subsequent pages) provide clear and compelling guidance for education stakeholders to implement 21st century skills curriculum and instruction initiatives?**
- 3. Are there additional examples you would like to suggest, to illustrate any of the key recommendations?**
- 4. If you can, consider all 5 Implementation Guides as a group. What kind of introduction would you recommend to connect them in a useful way? (In other words: we recognize that these support systems are parts of a highly interconnected system. We hope to craft an introduction that connects the key points in each guide and ties each one to a comprehensive vision for 21st century skills teaching and learning. We welcome any thoughts on this topic.)**

Comments can be posted on the Cybersummit site. Thank you for your interest in the Implementation Guide DRAFT. Final versions will be available in August 2009.

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21st Century Skills Curriculum & Instruction: A Support System Implementation Guide

Produced by
The Partnership for 21st Century Skills
Washington, D.C.



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Rationale

Our nation faces serious questions in regards to our educational system. The purpose of this document is to provide you with perspective on the key issues to consider—as a policy maker, as state leader, as a district or school administrator—to ensure that you are planning for the future and building strategies that will solidify the success of our students, not only in school and work, but in life.

What do we mean by 21st century skills? These are the skills students need to succeed in work, school and life. They include:

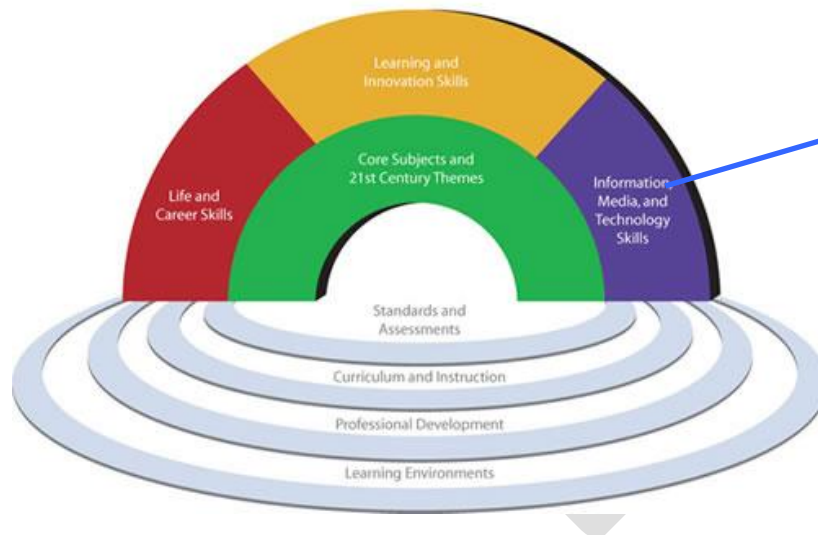
Core subjects (as defined by NCLB)

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 and communications technology literacy
Life skills: leadership, ethics, accountability, adaptability, personal productivity, personal responsibility, people skills, self-direction and social responsibility

Vision

Student mastery of 21st century skills should be recognized as one of the most critical outcomes of the teaching and learning process. Therefore, it is necessary to develop and implement curriculum and instructional strategies that—by design—enhance these skills.



To meet the needs of the 21st century learner, schools will need to adopt a 21st century skills curriculum and employ methods of instruction that integrate innovative, research-proven teaching strategies, modern learning technologies, and real world resources and contexts.

Guiding Recommendations, Promising Practices

The following action steps can be taken to move states, districts and schools towards ensuring that our nation’s students will be prepared for success in the 21st century.¹

Guiding Recommendations – Curriculum	Promising Directions
<p>1. Develop Curricula for Understanding. Ensure that curricula are designed to produce deep understanding and authentic application of 21st century skills. This by definition will enable the development of 21st century skills; curricula should include models for appropriate learning activities that accomplish 21st century skills outcomes.</p>	<p>New Technology High School: Students learn in an innovative and professional environment fostered by the use of advanced learning methods and technology. Both staff and students understand the commitment necessary to implement a rigorous and relevant curriculum, one in which technology standards and skill development are embedded. http://www.newtechhigh.org/</p> <p>RxeSEARCH: An Educational Journey is a STEM related curriculum used in over 40 high schools in New Jersey, New York, Connecticut, Massachusetts, Pennsylvania and Iowa. It teaches the understanding of R&D principles and processes and prepares for knowledge transfer from school to work. Students draw from their core subject knowledge and apply it in simulated experiences (epidemics, performing research to develop new cures.)</p>
<p>2. Unpack the Standards to Articulate Essential Concepts and Skills. Use curricula to articulate the essential understandings and 21st century skills contained within the standards. Ensure all curricula materials (curriculum guides, model units) clearly identify the big ideas and 21st century skills as the goals for learning.</p>	<p>The Iowa Core Curriculum defines the essential knowledge and skills that each student must learn to succeed in postsecondary life. The ICC includes content areas such as literacy, math, science and social studies and 21st century skills like civic, health, financial and technology literacy. In conjunction with the core curriculum, Iowa has created a framework that sets standards for teaching academic subjects to maximize rigor, increase student engagement, support in-depth coverage of material, and equip students with the skills required to prosper in today’s world.</p> <p>http://www.iowa.gov/educate/index.php?option=com_content&task=view&id=674&Itemid=1249</p>

¹ Many of the principles outlined in this document have been detailed by Linda Darling-Hammond, John Bransford and Jay McTighe in relation to teaching and learning for understanding. See resource list.

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<p>3. Build Widespread Consensus Around the Big Ideas and Essential Questions. Involve educators and stakeholders at all levels to ensure the big ideas, essential questions and enduring understandings—particularly those that emphasize 21st century skills—are supported and understood.</p>	<p>North Carolina’s “Future Ready Students” initiative is reflected in the State Board of Education’s mission: to enable every public school student to graduate from high school, globally competitive for work and postsecondary education and prepared for life in the 21st Century. This statewide vision frames the collaborative efforts between education, business and community leaders to improve teaching and learning, and informs the state’s 21st century skills work in standards, professional development, curriculum and assessment.</p>
<p>4. Use Curriculum-Embedded Performance-Based Assessments. Design and implement curriculum-embedded, performance based assessments that are integrated and aligned with the state accountability system.</p>	<p>(example)</p>
<p>5. Commit to Continuous Improvement in 21st Century Curriculum Design Processes. Commit to an ongoing process of reflecting upon and revising curricula with the purpose of improving the teaching and learning of 21st century skills over time.</p>	<p>(example)</p>
<p>6. Collaborate. Educators should initiate meaningful partnerships with key stakeholders, content developers and curriculum providers to ensure a wide range of instructional products are designed to produce 21st century skills outcomes.</p>	<p>New Jersey is partnering with several professional associations on a year-long project to create an exemplar curriculum that incorporates 21st century skills in each content area. These exemplars will be accessible to all school districts upon completion, including workshops supporting effective implementation of these curricular models.</p>
<p>Guiding Recommendations – Instruction</p>	<p>Promising Directions - Instruction</p>
<p>1. Use “Teach for Understanding” Principles. Develop and deliver lessons and units that connect the most essential concepts and skills students need to know and do; this means avoid teaching</p>	<p>(example)</p>

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<p>disparate, unconnected facts which inhibits the development of critical thinking, problem solving and other 21st century skills. Coach students to progress from teacher-guided experience toward independent application, interpretation, and explanation.²</p>	
<p>2. Create Meaningful Opportunities for Student Demonstration/Mastery of 21st Century Skills. Ensure that students have real-world opportunities to synthesize, apply and demonstrate their mastery of key concepts and 21st century skills.</p>	<p>North Carolina is piloting a science class on genetic counseling that uses curriculum-embedded assessments; students learn the science behind genetics and apply this knowledge to patient counseling scenarios. Skills like communication, information literacy and collaboration are intentionally taught, honed and assessed in an integrated fashion, within the context of the science class.</p>
<p>3. Deliver Learner-Centered Instruction that Enables 21st Century Skills. Commit to meeting the unique 21st century skills needs of each student. Connect curriculum to learners’ experiences and frames of reference to build upon each student’s knowledge and experience and help them systematically expand their abilities and master new concepts and proficiencies.³</p>	<p>Maine’s “Creating the Conditions for All Students to Graduate Post-Secondary, Career, and Citizenship Ready for the 21st Century” project focuses on creating a standards-based education system that emphasizes personalization. In this system, students do not move onto the next level of learning until they demonstrate proficiency as measured by the standards.</p>
<p>4. Reflect, Refine, and Improve 21st Century Skills Instruction. Educators should develop personal learning communities (and advocate for the school-wide time and support for them); use PLC’s to reflect and refine instructional methods that enhance 21st century skills mastery in classroom practice.</p>	<p>West Virginia conducts extensive programs (spanning over 7 months) to engage educators in designing authentic, engaging units that incorporate big ideas and 21st century skills. The Department of Education brings teachers together for in depth peer review sessions that strengthen the overall quality of their 21st century skills units and assessments. Just as important, these sessions provide teachers time to share their thinking and their learning with their peers, to enhance their personal learning communities/networks.</p>

² Brown, 2004

³ Hammond, Linda Darling, p. 198

Resources

The Partnership for 21st Century Skills has compiled the following list of resources to provide you with background knowledge, models and best practices in the various areas of assessment, as well as a list of key expert contacts.

A complete updated list of available references, including reports, state initiatives, white papers and more are available at www.21stcenturyskills.org.

21st Century Skills Maps In collaboration with the national content area organizations, the Partnership for 21st Century Skills has developed a series of 21st Century Skills Maps illustrating the intersection between 21st century skills and core academic subjects including English, social studies, geography and mathematics. These maps provide educators with short idea-generating examples of how these skills can be integrated into core subjects while making the teaching and learning of core subjects more relevant to the demands of the 21st century.

http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=31&Itemid=33

Bransford, John. How People Learn. Washington: National Academy Press, 2000.

Brown, John L. Making the Most of Understanding by Design. ASCD 2004.

Darling-Hammond, Linda. Powerful Learning: What We Know About Teaching for Understanding. San Francisco: John Wiley & Sons, Inc., 2008

Wiggins, Grant and Jay McTighe, Understanding by Design. 2nd Ed. ASCD, 2005.

About the Partnership for 21st Century Skills

The Partnership for 21st Century Skills has emerged as the leading advocacy organization focused on infusing 21st century skills into education. The organization brings together the business community, education leaders and policymakers to define a powerful vision for 21st century education to ensure every child's success as citizens and workers in the 21st century. The Partnership encourages schools, districts and states to advocate for the infusion of 21st century skills into education and provides tools and resources to help facilitate and drive change.

To learn more about 21st century learning and state actions to date, visit www.21stcenturyskills.org.

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