



# Learning Environments: A 21st Century Skills Implementation Guide



Produced by



**PARTNERSHIP FOR  
21ST CENTURY SKILLS**



**To succeed in college, career and life** in the 21st century, students must be supported in mastering both content and skills. This Implementation Guide presents state leaders, policymakers and/or district and school leaders with assessment tactics and examples to assist in statewide 21st century skills initiatives. The Partnership for 21st Century Skills has issued five brief, user-friendly guides, one for each of the P21 support systems:



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

It is worth noting that these support systems are not merely ends, but means to a greater goal—to help children develop the cognitive, academic, emotional and physical competencies they need to succeed in 21st century life.

The Partnership recognizes that taking an aligned, comprehensive approach across all five support systems is a significant challenge for all educators. The Implementation Guides have been developed to help support this difficult work. While not every recommendation and example will apply to every state, we hope the resources will help jumpstart efforts to produce more capable, successful 21st century students and citizens.

## All 21st century skills initiatives must focus on:

### 1: Core Academic Subject Mastery

It is important to note that no 21st century skills implementation can be successful without developing core academic subject knowledge and understanding among all students. Students who can think critically and communicate effectively *must build on a base of core academic subject knowledge*. For this reason, core academic subjects are a bedrock component of the P21 Framework for 21st Century Learning. All 21st century skills can and should be taught in the context of core academic subjects.

### 2: 21st Century Skills Outcomes

In addition to core subject mastery, the Partnership asks every state, district and school the following question: are schools helping students become...

- Critical thinkers?
- Problem solvers?
- Good communicators?
- Good collaborators?
- Information and technology literate?
- Flexible and adaptable?
- Innovative and creative?
- Globally competent?
- Financially literate?

To learn more about the Partnership's state initiatives, the Framework or the Implementation Guides, please visit [www.21stcenturyskills.org](http://www.21stcenturyskills.org).

## Rationale

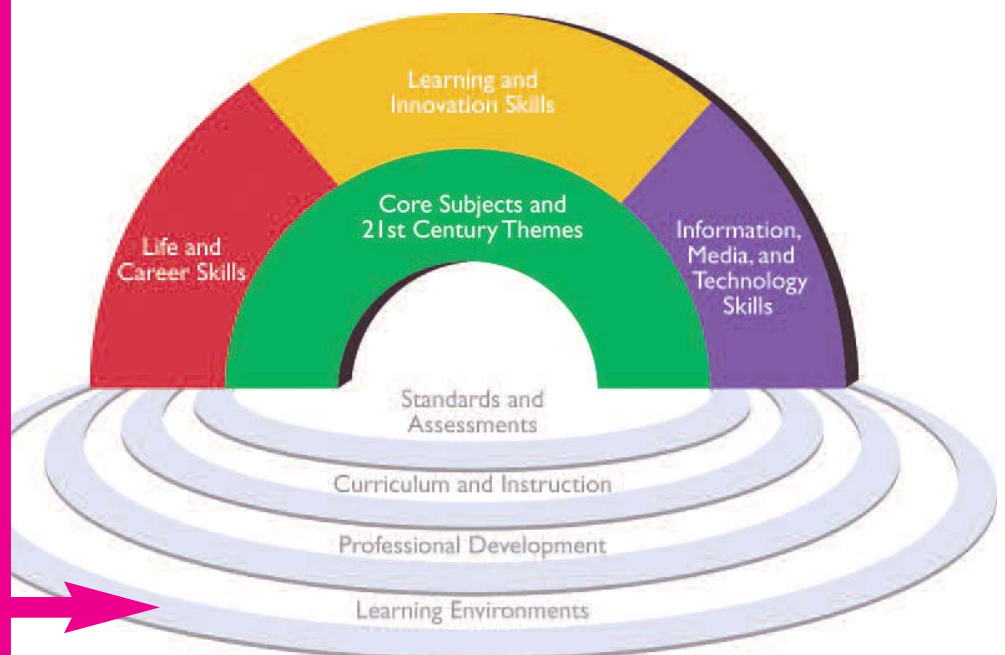
Our nation faces serious questions in regards to our educational system. The purpose of this document is to provide you with perspective on the key issues to consider—as a policy maker, as state leader, as a district or school administrator—to ensure that you are planning for the future and building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

## Vision

The term “learning environment” covers not only place and space (e.g., a school, a classroom, a library, an online learning community), but the relationships that create a supportive environment for every child’s development. In the 21st century, learning environments should be seen as the support systems that organize the condition in which humans learn best—systems that accommodate the unique needs of every learner and support the positive human relationships needed for effective learning.

Learning environments are the structures, tools and communities that inspire students and educators to attain the knowledge and skills the 21st century demands of us all.

*A child who enters school in good health and feels safe and connected to her school is ready to learn. A student who has at least one adult in school who understands his social and emotional development is more likely to stay in school. All students who have access to challenging academic programs are better prepared for further education, work and civic life. These components must work together, not in isolation. That is the goal of whole child education. – Making the Case for Educating the Whole Child, ASCD, 2009*



A 21st century learning environment is an aligned and synergistic system of systems that:

- Creates learning practices, human support and physical environments that support the teaching and learning of 21st century skills outcomes.
- Supports professional learning communities that enable educators to collaborate, share best practices and integrate 21st century skills into classroom practice.
- Enables students to learn in relevant, real world 21st century contexts (e.g., through project-based or other applied work).
- Allows equitable access to quality learning tools, technologies and resources.
- Provides 21st century architectural and interior designs for group, team and individual learning
- Supports expanded community and international involvement in learning, both face-to-face and online.

Schools and other places of learning must to reflect our understanding of how people learn. In a recent AAF white paper, former principal Elizabeth Lodal notes that today's students "...need to be inspired to become creative problem solvers and intellectual risk takers so that they are prepared for the world of the 21st century. School design will either inhibit or support and enhance such a robust education program."<sup>1</sup> And while every school will reflect the unique needs of its community, there are sound design principles to guide the creation of learning environments that truly promote the kind of education on which 21st century students will thrive.

<sup>1</sup>American Architectural Foundation. School Design and Student Learning in the 21st Century.  
<http://www.archfoundation.org/aaf/documents/report.designforlearning.pdf>

## Guiding Recommendations, Promising Directions

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.

Guiding Recommendations	Promising Directions
<p><b>#1: Establish a 21st century vision for learning environments in your state/district.</b> In the 21st century, learning environments extend beyond brick and mortar buildings. Learning occurs in classrooms, but it also occurs virtually and through afterschool programs—it happens in an environment that surrounds the child, 24/7. These learning environments should accommodate the needs of each student and support the development of the whole child, ensuring their academic as well as their emotional, social and physical development.</p>	<ul style="list-style-type: none"> <li>• <b>The Build SF Institute's School-to-Career Program</b> engages San Francisco students in architectural projects and internships that integrate real-life math, science, design and technology skills. <a href="http://www.edutopia.org/learning-design">http://www.edutopia.org/learning-design</a></li> <li>• <b>ASCD's Whole Child Initiative</b> provides research, resources and networking opportunities to ensure the development of children and young people who are healthy, safe, engaged, supported and challenged in their schools and communities. <a href="http://www.wholechildeducation.org">www.wholechildeducation.org</a></li> </ul>
<p><b>#2: Ensure educational structures enable 21st century skills.</b> Physical spaces should be flexible and adaptable, enable collaboration, interaction and information sharing, and should be connected with the larger community that surrounds the school.</p>	<p><b>Three DesignShare 2007 winners</b> all look and feel very different, as one would expect given their very different student bodies and instructional missions:</p> <ul style="list-style-type: none"> <li>• <b>A nursery school in Japan</b> features a huge indoor activity space that emphasizes unstructured play.</li> <li>• <b>An alternative learning center in Alaska</b>, created from an old movie theatre, incorporates elements of that state's unique cultural heritage and focuses on self-directed learning.</li> <li>• <b>A Denver charter school</b>, aimed at increasing the participation of low income and female students in technology, integrates high-tech design with "soft touch" furniture and moveable walls that promote the sensory experience of learning.</li> </ul>
<p><b>#3: Move toward flexible units of time that enable project-based work, interdisciplinary themes and competency-based measures of student progress.</b> Move away from the "seat time" approach to gauging annual student progress.</p>	<ul style="list-style-type: none"> <li>• <b>SIIA Vision K-20</b> is working toward their goal of, by the end of the decade, every K-20 institution having an instructional and institutional framework that embraces technology and e-learning.</li> <li>• <b>Cisco Systems</b> and <b>Metiri Group</b> have reviewed the research on the effectiveness of education technology, and outlined the general trends and their effectiveness to help educators invest more wisely in technology.</li> <li>• <b>CoSN</b> has created a resource website, Empowering the 21st Century Superintendent at <a href="http://www.superintendentempower.org/">http://www.superintendentempower.org/</a>, to provide information that helps superintendents make better technology-related decisions.</li> <li>• <b>ISTE's CARET</b> website "bridges education technology research to practice by offering research-based answers to critical questions." <a href="http://caret.iste.org/">http://caret.iste.org/</a></li> </ul>

Guiding Recommendations	Promising Directions
<p><b>#5: Empower the “People Network” in learning environments.</b> This is one of the most important aspects of 21st century learning environments. Teachers must move from isolation to connection, creating an optimistic educational culture positively impacts student learning. Teachers must have ways to refine their knowledge and skills in collaborative, supportive environments.</p>	<p><b>Teacher Leader Capacity Building Model:</b> Southfield Public Schools, Michigan and Cypress Fairbanks ISD in Houston, Texas are implementing capacity building professional development using the teacher leader model at selected schools in their districts. Teacher leaders are leading the professional learning of their colleagues and have their classrooms serve as demonstration classrooms. District leaders have played an integral role in ensuring that effective professional development planning happens before and during the implementation, including gathering evidence of changes in teacher practice. <a href="http://www.ascd.org">http://www.ascd.org</a></p>

## 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 learning environments, as well as a list of key expert contacts.

ASCD <http://www.ascd.org>

ASCD Whole Child Initiative <http://www.wholechildeducation.org>

CARAT – Center for Applied Research in Educational Technology <http://caret.iste.org/>

CISCO <http://www.cisco.com/web/strategy/education/index.html>

CSEE – Center for Social and Emotional Education, national school climate standards [www.schoolclimate.org](http://www.schoolclimate.org)

DesignShare <http://www.designshare.com/index.php/home>

Empowering the 21st Century Superintendent <http://www.superintendentempower.org/>

A complete updated list of available references, including reports, state initiatives, white papers and more are available at **[www.21stcenturyskills.org](http://www.21stcenturyskills.org)**.

### Free White Paper on 21st Century Skills Learning Environments

Download "21st Century Learning Environments" from the Partnership for 21st Century Skills website at [http://www.21stcenturyskills.org/documents/le\\_white\\_paper-1.pdf](http://www.21stcenturyskills.org/documents/le_white_paper-1.pdf).

## 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](http://www.21stcenturyskills.org)**.

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