Education Facilities Specifications 28 October 2011 Century Schools

FACILITIES FOR 21ST CENTURY LEARNING

Implications for 21st Century Learning

Curriculum and Instruction

Current Thinking

Curriculum is typically based on **core subjects** that include English, reading/language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics. **Themes** such as global awareness, financial, economic, business and literacy (entrepreneurial, civic, health, and environmental) are often incorporated. **Skills** that are generally considered necessary for success in the twenty-first century business world include research and communication, thinking and problem solving, interpersonal relations, and self-directional information technology. Notably, these skills are among those included in the twenty-first century skills gap — a label given to abilities that are lacking in today's students entering the workplace.

Skills provide specific application of core subjects and themes, and may be subdivided as follows:

- Life and Career Skills: flexibility and adaptability, initiative and self-direction, social and crosscultural skills, productivity and accountability, leadership and responsibility
- Learning and Innovation Skills: creativity and innovation, critical thinking and problem solving, communication and collaboration
- Information, Media and Technology Skills: information literacy, media literacy, information, communication and technology (ITC) literacy

Another way to understand 21st Century learning is to consider the following characteristics as a preview of a successful program: teachers as leaders and guides, project-based curriculum, final presentations (to classmates and outside experts), "office setting" with personalized spaces for individual and group learning. Computer access is critical.

Consider..."If students know **how** to learn, they don't need to be told **what** to learn."

Many of the following 21st Century learning characteristics address the environment of the learner: privacy, personal space, resource access, control of environment, physical comfort, team mobility, flexibility, variably sized spaces, and technology.

When addressing instruction, the following components are commonly considered for a comprehensive 21st Century education program: student knowledge and skills, education support systems, education leadership, institutional policymaking, partnering, and continuous improvement/strategic planning.

Finally, curriculum and instruction must be informed by feedback from 21st Century learning communities regarding their effectiveness. Among many useful aspects to consider are encouragement for students, professional development for teachers and staff, performance measurement, and evaluation.

DoDEA Direction

These key ideas and common themes are most useful in further consideration of 21st Century curriculum and instruction:

- Provide hands-on learning that is personalized to meet individual learning needs.
- Provide instruction that is diverse and accommodates multiple learning styles.
- Provide one-to-one learning using current technology.
- Give students accountability for their own learning.
- Consider delivering instruction using technology that is native to students: smart phones, the Internet, computers, and post-computer devices (iPad).
- Provide project-based learning experiences: team work, problem solving, presentation, interaction with outside experts.
- Integrate technology into education.
- Provide integrated and interdisciplinary instruction.
- Emphasize the role of teachers as facilitators and connectors.
- Emphasize rigor in learning.
- Provide real-world skills development.
- Core competencies remain the same, but delivery methods change.
- STEM (science, technology, engineering, mathematics) needs to include the arts; consider STEAM (science, technology, engineering, arts and mathematics).
- Emphasize curriculum constructs: communication, collaboration, critical thinking and problem solving, supported by the core curriculum.





