Implications for 21st Century Learning

Curriculum and Instruction

Current Thinking
Curriculum is 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 into the curriculum along with 21st Century Learner outcomes. Skills that are generally considered necessary for success in the twenty-first century business world include research and communication, critical thinking and problem solving, collaboration across networks, adaptability and agility, curiosity and imagination and the integration of technology into all aspects of learning. Notably, these skills are among those included in the 21st Century skills gap — a label given to abilities that are lacking in today’s students entering college and careers.

Themes provide a specific broad application to core subjects and may be subdivided as follows:

- Life and Career Skills: flexibility and adaptability, initiative and self-direction, social and cross-cultural 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 teaching and learning is to consider the following characteristics as a preview of a successful program: teachers as leaders and facilitators of learning, student-centered pedagogical practices, an innovative learning environment, technology integration final presentations (to classmates and outside experts). The development of a risk-free teaching and learning culture is as critical as the technology that will engage and inspire teaching and learning.

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 that address the environment of the learner are: 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: engaging students in student-centered pedagogical approaches, utilizing education support systems, building 21st Century leadership, developing institutional policymaking, including key partnerships and continuously planning for strategic improvement.

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 tablets.
- Provide project-based learning experiences: team work, problem-solving, presentation, interaction with outside experts and multiple standards-based learning.
- 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 and application.
- 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 and Common Core State Standards.