

# DODEA IDEOLOGY AND EDUCATIONAL PEDAGOGY



## 21<sup>st</sup> Century Learning Overview

### History of Education—from Industrialization to Differentiated Learning

The first public schools in the United States were established in the late eighteenth and early nineteenth centuries, represented by the iconic one-room schoolhouse. The curriculum featured the "3-Rs:" reading, writing and arithmetic for 6 years of education. These schools were sized for a local population of 50 to 100 students within walking distance of the school facility.

In the mid-nineteenth century, more subjects were added: science, language, music, art and physical education. Buildings were larger and provided additional outdoor facilities. By the second half of the nineteenth century, instruction was tailored to prepare students for the industrial workforce and many facilities seemed to be modeled on a factory layout. Pedagogy was primarily teacher-centered, with

students on the receiving end. Classes grew to a common size of 50 to 60 students, with school enrollment of more than 1,000 students. School design evolved to double-loaded corridors serving classrooms equipped with fixed desks in rows facing the teacher's desk at the front of the room. Many saw this approach as standardized teacher-centric instruction forced to teach to the lowest common denominator.

Early in the twentieth century, schools included features that have remained in vogue to this day such as specialized classrooms and shared facilities for community use. Many schools today still reflect their nineteenth or twentieth century origins with rigid schedules and inflexible facilities, and fixed boundaries between grades, disciplines, classrooms, and functional roles.

The 21<sup>st</sup> Century learning environment is evolving to support the ways that children learn best – a pedagogical system that accommodates the unique

instructional needs of every learner and supports the positive human relationships needed for effective learning. These learning environments holistically include the facilities, technologies, and communities that inspire students and educators to attain relevant skills. Effective learning occurs when these three elements are creatively integrated into a seamless whole in which each reinforces the other to help children grow emotionally, socially, physically, and academically.

21<sup>st</sup> Century learning environments should address the multiple, interconnected learning needs of the whole child. Schools should foster a learning environment that enables children to be healthy, safe, engaged, supported, and challenged. In today's interconnected, technology-driven world, a learning environment can be virtual, online, or remote. It is important to remember that technology, space, time, culture, and policy are critical key elements that have even greater impact when considered collectively.

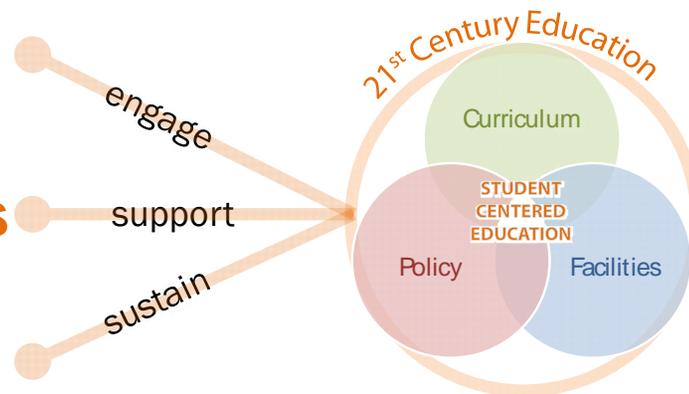
To achieve these goals, a learning environment must be an aligned, synergistic system in order to:

- Create learning practices, human support and physical environments that enable 21<sup>st</sup> Century skill outcomes.
- Support learning communities that enable educators to collaborate, share best practices, and integrate 21<sup>st</sup> Century skills into the learning environment.
- Enable students to learn in relevant, real world twenty-first century contexts through project-based assignments.
- Allow access to quality learning tools, technologies,

■ Strong **Communities**

■ Consistent **Core Values**

■ Valuable **Resources**





- and resources.
- Provide spaces for group, team, and individual learning.
  - Support the expanded community and global involvement to learn both face-to-face and online.

For the 21<sup>st</sup> Century learning environment, schools should be re-designed to reach beyond the traditional classrooms many adults experienced when they were young. The learning environment of the twenty-first century should encompass a rich combination of media and devices, varied cultures, and virtual and real-life relationships. Students should occupy spaces that are engaging, relevant and promote a sense of well-being and belonging.

School designs should convey a friendliness, openness, and accessibility that promotes cooperation and interaction, and reduces the tensions that can lead to inattentiveness, acting out, and bullying.

DoDEA school environments around the globe should be consistent, yet reinforce the uniqueness of the military family. For this reason, DoDEA schools should "create an environment where students know each other and know their instructors as people - not just as teachers."

### **Redefining Achievement**

The transition from the present learning environment to the 21<sup>st</sup> Century environment can be considered as redefining achievement. With the transition from twentieth century to twenty-first century, there are three areas critical areas to focus our shifts:

1. Shift to student-centered teaching and learning approach to engage and empower students.
2. Shift to a high level focus on graduation rates to ensure our students' future in the workplace .
3. Shift our preparation to meet a global market place requiring technology and critical thinking skills to secure students' future college and career readiness.

Moving from twentieth-century pedagogy to 21<sup>st</sup> Century instruction requires a curriculum and a facilities transformation. Current facilities are restricting the instructional shift needed to reach the new teaching paradigm where education is focused on making students "college ready;" thus the importance of facility transformation is intensified.

DoDEA's has a significant opportunity to leverage the Department of Defense capacities in resource deployment, leadership training, and global networking toward preparing students to engage the world.

Education beyond the 21<sup>st</sup> Century emphasizes DoDEA's unique opportunity to go beyond the school to a global learning community. This may be a longer term vision that leverages the military's rich history of leadership, global networks, and resource deployment. The network of global DoDEA schools can allow students to connect around the world with real-time, project-based learning.