21st Century Knowledge and Skills

EDU 420 Computers in the Classroom

Instructor: Dr. Han Liu

Need for Change

- The following factors have transformed the way people work and live:
 - Economic development
 - Technology
 - Information
 - Demography
 - Political forces

What Are 21st Century Skills

Core Subjects

- English
- Reading/Language arts
- Mathematics
- Science
- Foreign language
- Civics
- Government
- Economics
- Arts
- History
- Geography

ICT Literacy

- Information Literacy
- Media Literacy
- Interactive Communication
- Virtual Collaboration

Higher Order Thinking

- Creativity and Innovative Thinking
- Curiosity and Risk-Taking
- Complex Reasoning
- Virtual Collaboration

Global Awareness

- Social and Cultural Understanding
- Environmental Literacy
- Civic Engagement
- Renewable Energy and Sustainable Development
- Population

Economics Skills

- Finance
- Business
- Entrepreneurship

Life and Career Skills

- Adaptability and Self-direction
- Teaming and Collaboration
- Leadership and Responsibility

Health and Wellness

- Obesity
- Exercises
- Healthy Diet and Food Safety
- Clean Water and Air
- Epidemic Diseases
- Pressure Release
- Preventive Culture vs. Treatment Culture

Six Key Elements of 21st Century Learning

- Emphasize core subjects
- Emphasize learning skills
- Use 21st century tools to develop learning skills
- Teach and learn in a 21st century learning context
- Teach and learn 21st century content
- Use 21st century assessment that measure 21st century skills

21st Century Learning Skills

- Learning skills comprise three broad categories of skills
 - Information and communication skills
 - Thinking and problem solving skills
 - Interpersonal and self-directional skills

21st Century Content

- Global Awareness
- Financial, Economics, and Business Literacy
- Civic Literacy

Quote: Alvin Toffler

• "The illiterate of the 21st century will not be those who can not read or write, but those who can not learn, unlearn, and relearn."

<u>The World is Flat – Friedman</u> <u>21st Century Skills</u>