

**Skills that Last a Lifetime**  
 Critical Competencies for the 21<sup>st</sup> Century & Beyond

---

---

---

---

---

---

---

---

**Welcome!**

- Getting to Know You & Me
- What's Next?



Platform of the skills for the 21<sup>st</sup> Century  
 Competencies & skill-building methods  
 Hands-on activities & tools

Poem:  
 My mama told me...

---

---

---

---

---

---

---

---

*Platform for Skills of the 21st Century*

**“School should be less about preparation for life and more about life itself.”**

*John Dewey*

---

---

---

---

---

---

---

---

## Platform for Skills of the 21st Century

### Core Subjects & Interdisciplinary Themes

- English, Reading, Language Arts
- Foreign Languages
- Arts
- Mathematics
- Economics
- Science
- Geography
- History
- Government & Civics
- Global Awareness
- Financial, Economic, Business & Entrepreneurial Literacy
- Civic Literacy

### ★ Learning & Innovation Skills

- Critical Thinking And Problem Solving
- Creativity And Innovation
- Communication And Collaboration

### Information, Media & Technology Skills

18 higher order thinking skills

---

---

---

---

---

---

---

---

---

---

## Creativity and Innovation

- **Think Creatively**
  - Use wide range of idea creation techniques (such as brainstorming)
  - Create new & worthwhile ideas (both incremental & radical concepts)
  - Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts
- **Work Creatively with Others**
  - Develop, implement & communicate new ideas effectively
  - Be open & responsive to new & diverse perspectives; incorporate group input & feedback into the work
  - Demonstrate originality & inventiveness in work & understand real world limits to adopting new ideas
  - View failure as an opportunity to learn; understand that creativity & innovation is a long-term, cyclical process of small successes & frequent mistakes
- **Implement Innovations**

Partnership for 21st Century Skills -- [www.21stcenturyskills.org](http://www.21stcenturyskills.org)

---

---

---

---

---

---

---

---

---

---

## Critical Thinking and Problem Solving

- **Reason Effectively**
  - Use various types of reasoning (Inductive, deductive, etc.) appropriate to situation
- **Use Systems Thinking**
  - Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems
- **Make Judgments and Decisions**
  - Effectively analyze/evaluate evidence, arguments, claims & beliefs
  - Analyze & evaluate major alternative points of view
  - Synthesize & make connections between information & arguments
  - Interpret information & draw conclusions based on best analysis
  - Reflect critically on learning experiences & processes
- **Solve Problems**
  - Solve different kinds of non-familiar problems in both conventional & innovative ways
  - Identify & ask significant questions that clarify various points of view & lead to better solutions

Partnership for 21st Century Skills -- [www.21stcenturyskills.org](http://www.21stcenturyskills.org)

---

---

---

---

---

---

---

---

---

---

## Communication & Collaboration

- **Communicate Clearly**
  - Articulate thoughts/ideas effectively using oral, written & nonverbal communication skills in a variety of forms/contexts
  - Listen effectively to decipher meaning, including knowledge, values, attitudes & intentions
  - Use communication for a range of purposes (e.g. to inform, instruct, motivate & persuade)
  - Utilize multiple media & technologies, & know how to judge their effectiveness as well as assess impact
  - Communicate effectively in diverse environments (including multi-lingual)
- **Collaborate with Others**
  - Demonstrate ability to work effectively & respectfully with diverse teams
  - Exercise flexibility & willingness to be helpful in making necessary compromises to accomplish a common goal
  - Assume shared responsibility for collaborative work, & value individual contributions made by each team member

Partnership for 21st Century Skills -- [www.21stcenturyskills.org](http://www.21stcenturyskills.org)

---

---

---

---

---

---

---

---

## Learning & Innovation Skills

- **Critical Thinking & Problem Solving**
- **Creativity & Innovation**
- **Communication & Collaboration**
- Learning must be a lifelong pursuit – a thirst for knowledge
- The new world of work in which the most desirable jobs – the ones least likely to be automated or outsourced – are those that require *expert thinking* and *complex communication*  
Economists Frank Levy and Richard Murnane
- The Learning & Innovation Skills section focus is on  
– **Higher Order Cognitive Competencies**

---

---

---

---

---

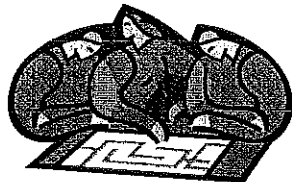
---

---

---

## Thinking Creatively

- **Defining Critical Thinking**
- **Brainstorm words that define “CRITICAL THINKING”**



---

---

---

---

---

---

---

---

## Critical Thinking - A Working Definition

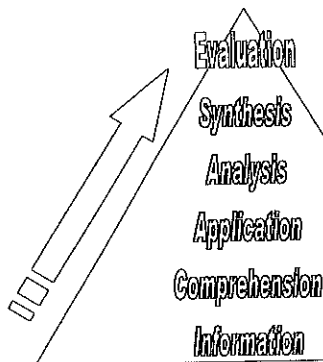
- A process of
  - Actively & skillfully
    - Conceptualizing
    - Applying
    - Synthesizing
    - Evaluating
  - Information gathered from or generated by
    - Observation
    - Experience
    - Reflection
    - Reasoning
    - Communication
  - As a guide to belief & action



1. Do some brainstorming

Teach students how to reflect.

## Bloom's Taxonomy



90% of time on info, application & comprehension

Don't get to analysis, synthesis & evaluation

2. Switch up how we ask Q's. Start with analysis + and then move down.

## Two Components

- **Skills** to process & generate information & beliefs
- **Habit** of using those skills to guide behavior



## ***Critical Thinking***

### **• Involves**

- Analyses of Experiences
- Reflections & Discernment
- Discussions
- Processing
  - Intuitive
  - Creative
  - Emotional



(Jack Mezirow)

---

---

---

---

---

---

---

---

## ***Can You do the Following?***

- Locate the argument in a passage
- Detect errors in ways of thinking & explain how the thinking is in error
- Evaluate evidence & make appropriate assumptions from that evidence?
- Distinguish whether an argument's conclusion follows with certainty or only with probability

---

---

---

---

---

---

---

---

## ***Can You do the Following?***

- Identify implied assumptions
- Identify the issue in a disagreement
- Detect logical inconsistency
- Detect & remove vagueness & doubt
- Identify the point or purpose of remarks
- Create an argument that avoids the misleading notion & makes a probable case for a position on an issue

---

---

---

---

---

---

---

---

## Can You do the Following?

- Given an argument on a controversial issue, create a reasonable argument that defends a different or opposite conclusion
- Detect a bad question because its "loaded" or contains hidden faulty data
- Be able to explain in what way this is comparable or similar to that
- Compare the quality of two competing explanations

*Bring in video clip of TV advertising*

## Applied Activities

Pay attention to what they tell you to forget



Muriel Rukeyser

## Name Three Places That...

- Are in your own city
- Are wet
- Have big doors
- You like to go after school
- You have a lot of fun
- A lot of people go to
- People play sports
- You can do your homework at
- Have a lot of books
- Police officers go to
- Musicians go to
- Are very warm
- Are very cold
- You go to on holidays
- You go to during the winter



*Notice similarities  
& differences*

# Metaphors

- Warm up
  - I feel..., When I'm happy I'm like...,
- Object
  - What object would you be if you had a choice?
- House
  - What kind of house would you be if you had a choice?
- Animal
  - What kind of animal would you be?
- Color
  - What Color are you?

Meggert, Sandra S., Creative Humor at Work

---

---

---

---

---

---

---

---

# Questioning

- Why is it called a "pair of pants?"
- What are five things you value most in life?
- What is the one thing you think of that always makes you smile?
- What makes something beautiful?
- How do you want to be remembered?

---

---

---

---

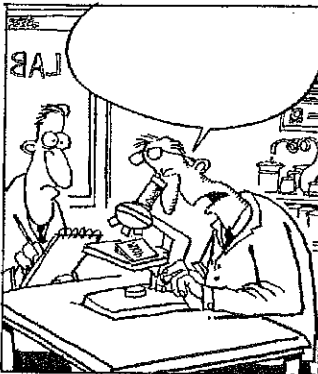
---

---

---

---

# Write Your Own Caption!



**Political  
Cartoon**

---

---

---

---

---

---

---

---

**Pictures are Worth a 1000 Words**



---

---

---

---

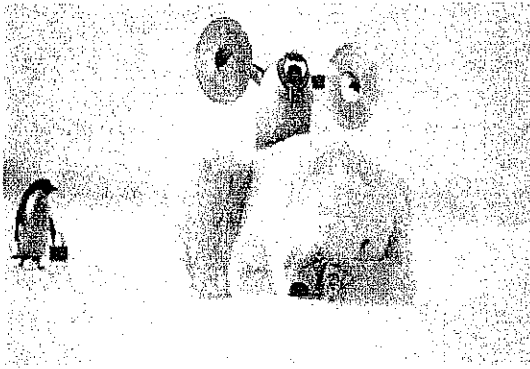
---

---

---

---

**Communication**



---

---

---

---

---

---

---

---

**Learning & Innovation Skills**

- Facilitators of learning
- Rather than Disseminators of knowledge
- What does it mean to be a Facilitator?
- What is the difference between A Facilitator & a Disseminator?



---

---

---

*-A Guide on the side*

---

---

---

---

## Characteristics

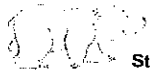
- Critical Thinking, Creativity, Communication & Collaboration...
  - Productive, positive activity
  - Process not outcome
  - Varies depending on context in which it occurs
  - Triggered by positive & negative events
  - Sensitive as well as rational

Stephen Brookfield, Developing Critical Thinkers

Critical thinking teacher into

## Components

- Identifying & challenging assumptions is central
- Challenging the importance of context is crucial
- Imagining & exploring alternatives
- Applying reflective skepticism



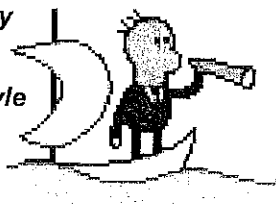
Stephen Brookfield, Developing Critical Thinkers

## Fostering Learning & Innovation Skills

- Exploration & Critical Thought
  - Investigation of new/different views

Use a multi-sensory approach

Respect learner style & preferences



## Ideas

- Free Dialogue followed by
  - Journal Writing
  - Drawing & Artistic Creations
  - Writing
  - Dramatization



---

---

---

---

---

---

---

---

## Ideas

- Think-aloud about a situation/event
  - Discussion – *What Do You Think I Should Do?*
- Discussion as a Teaching Strategy
  - What do you know/think?
  - How do you feel?
  - What did you learn?



*Why? goes to emotional side*  
*What? How goes to function, abstract*  
*Where? When? creative*

---

---

---

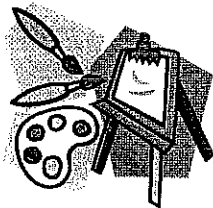
---

---

---

## Ideas

- Read a Story Aloud with Discussion
  - Current event
  - Critic's review
  - Reading of interest
- Case Scenarios
- Picture Presentation
- Movie or Play



---

---

---

---

---

---

---

---

## Instructors Must...

- Remove the penalty for critical & original thought
- ...People fear looking stupid or asking something that is dumb.
- ...must start removing conformity and the fear of dumbness from the classroom



Carol Travis - co-author of Psychology

## Reminder...

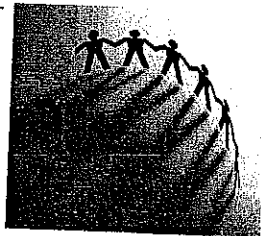
- "To be playful and serious at the same time is possible, and it defines the ideal mental condition."

John Dewey, *How We Think*



## For More Information or Training

Nancie Payne, M.S.  
Payne & Associates, Inc.  
205 Lilly Road NE  
Bldg. B, Ste A  
Olympia, WA 98506



Maximizing Human Resources

360-491-7600 Office  
360-491-0196 Fax  
[www.payneandassociates.com](http://www.payneandassociates.com)

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

