



Essential Skills for the 21st Century Workplace: Keys to Succeeding in the Global Economy

Charlie Kreitzberg
CEO, Cognetics Corporation

Ed Reilly
CEO, AMA

Ken Kay
President, Partnership for 21st Century Skills

Today's Speakers



Ken Kay is president of the Partnership for 21st Century Skills, an organization dedicated to promoting a new vision of what students need to be successful in a globally competitive economy. Ken also serves as the CEO and co-founder of the e-Luminate Group, an education consulting firm specializing in marketing communications .



Charles B. Kreitzberg founded Cognetics Corporation in 1982. Dr. Kreitzberg, who is currently CEO of Cognetics, was Director of Technology Research/Development at the Educational Testing Service in Princeton, New Jersey. In 1972, with his long-time colleague Ben Shneiderman, he published one of the first books on usability: *The Elements of Fortran Style*.



Edward T. Reilly is president and chief executive officer of American Management Association. Reilly previously served as president and chief executive officer of Big Flower Holdings, Inc. Prior to that, he spent over 25 years in a variety of senior executive positions with The McGraw-Hill Companies.

What is the Partnership for 21st Century Skills?

www.21stcenturyskills.org

The screenshot shows the homepage of the Partnership for 21st Century Skills website. At the top, there is a navigation bar with the logo and the text "PARTNERSHIP FOR 21ST CENTURY SKILLS" followed by menu items: "STATE INITIATIVES", "FRAMEWORK", "EVENTS & NEWS", "ABOUT US", and "RESOURCES". Below the navigation bar is a large banner image featuring a young boy on the left using a laptop and a young girl on the right reading a book in a library. The main content area is divided into three columns. The left column contains the text "The leading advocacy organization infusing 21st century skills into education." and a "SUBSCRIBE" section with a text input field and a "GO" button. Below this is a "Contact Us" link. The middle column is titled "HIGHLIGHTS" and features a section for "First Online Resource Dedicated to 21st Century Skills Teaching and Learning is Launched" with a sub-headline "Route 21 Provides Extensive Database on 21st Century Skills-Related Standards, Assessments, Curriculum, Professional Development and Learning Environments". Below this is a paragraph starting with "Washington, DC - Nov. 7, 2007 - Americans increasingly recognize that the U.S. education system can and should do more to prepare our young people to succeed in the rapidly evolving 21st century." The right column is titled "IN THE NEWS" and features a section for "U.S. Students Need 21st Century Skills to Compete in a Global Economy" with a sub-headline "Americans Express Strong Support in National Poll for Teaching More Than Basic Skills". Below this is a paragraph starting with "WASHINGTON, DC - Oct. 10, 2007 - A new, nationwide poll of registered voters reveals that Americans are deeply concerned that the United States is not preparing young people with the skills they need to compete in the global economy."

PS21 Members



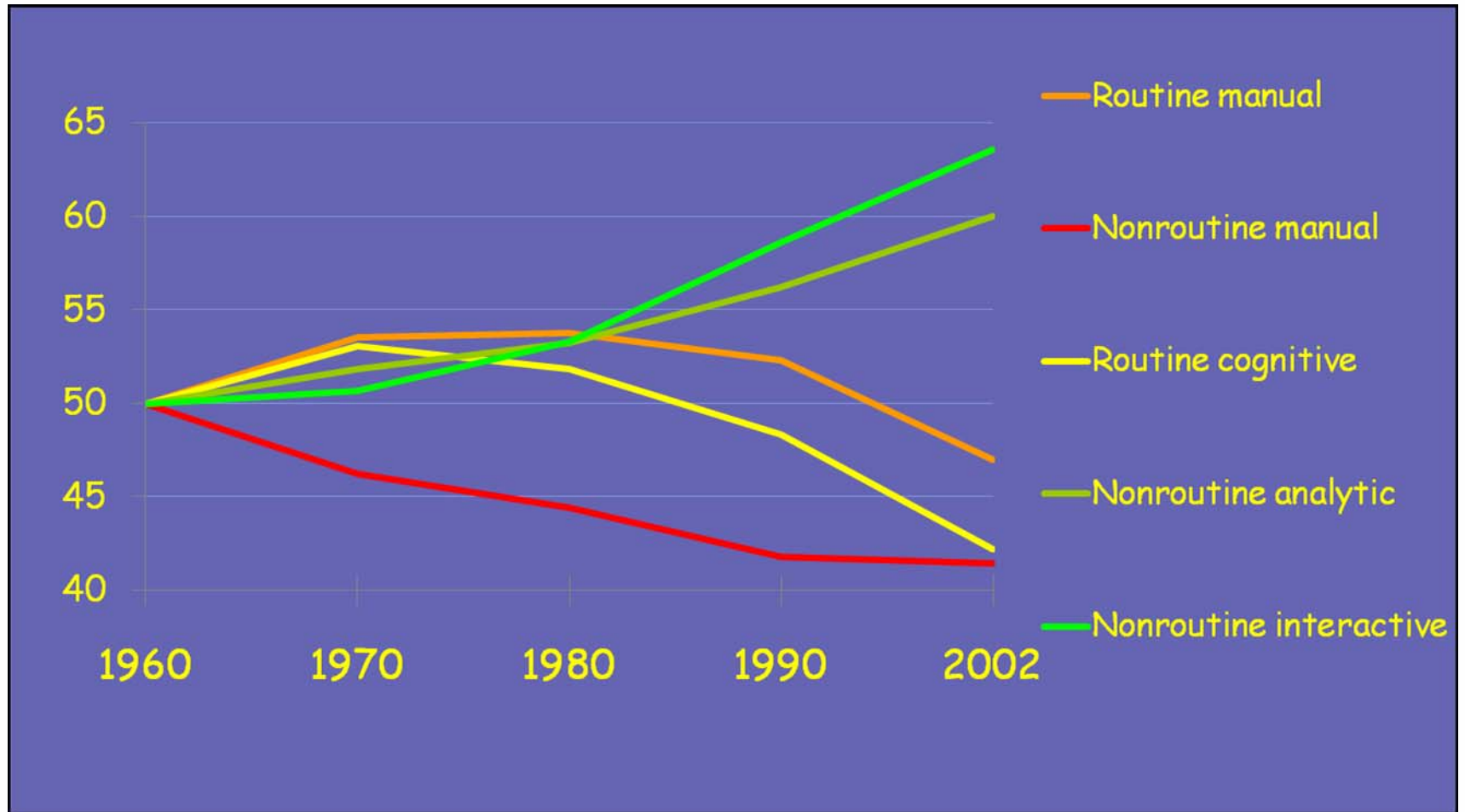
Overview

What are the key skills that young people and workers need in the 21st century?

How the demand for skills has changed

Mean task input as percentiles of the 1960 task distribution

Economy-wide measures of routine and non-routine task input (US)



(Levy and Murnane)

Why 21st Century Skills?

- What skills are most important for job success when hiring a High School graduate?

Work Ethic	80%
Collaboration	75%
Good Communication	70%
Social Responsibility	63%
Critical Thinking & Problem Solving	58%

Why 21st Century Skills?

- Of the High School Students that you recently hired, what were their deficiencies?

Written Communication	81%
Leadership	73%
Work Ethic	70%
Critical Thinking & Problem Solving	70%
Self-Direction	58%

Why 21st Century Skills?

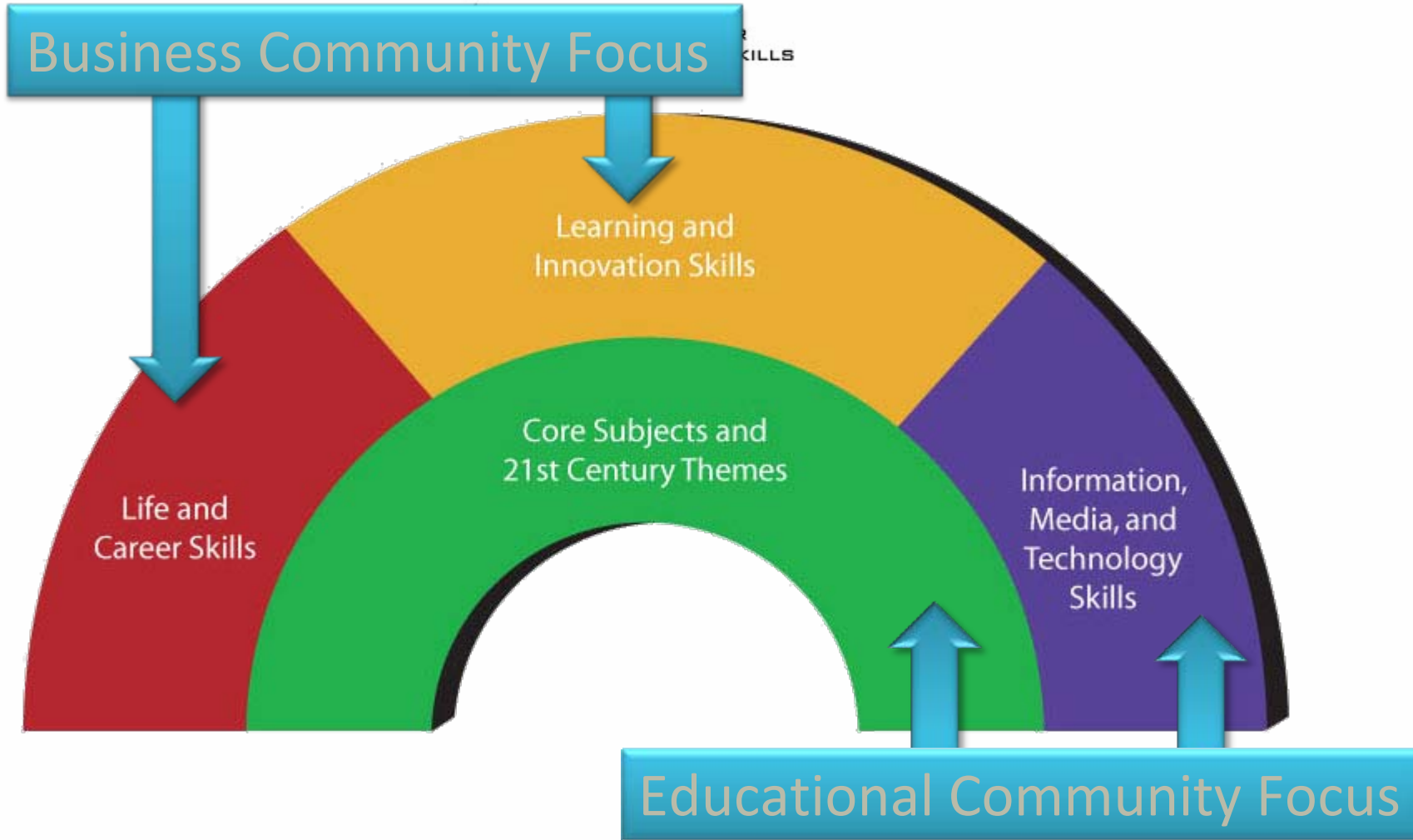
- What skills and content areas will be growing in importance in the next five years?

Critical Thinking	78%
I.T.	77%
Health & Wellness	76%
Collaboration	74%
Innovation	74%
Personal Financial Responsibility	72%

We need to
**develop the
life, learning and
innovation skills**
that are most important
in the workplace



The P21 Framework



The P21 Framework



PARTNERSHIP FOR
21ST CENTURY SKILLS

Core Subjects

- Economics
- English
- Government
- Arts
- History
- Geography
- Reading or Language Arts
- Mathematics
- Science
- World Languages
- Civics

Learning and
Innovation Skills

Core Subjects and
21st Century Themes

21st Century Themes

- Global Awareness
- Financial, Economic, Business & Entrepreneurship Literacy
- Civic Literacy
- Health Literacy

The P21 Framework



PARTNERSHIP FOR
21ST CENTURY SKILLS

Information, Media & Technology Skills

- Information Literacy
- Media Literacy
- ICT (Information, Communications & Technology) Literacy

Life and
Career Skills

Information,
Media, and
Technology
Skills

The P21 Framework



PARTNERSHIP FOR
21ST CENTURY SKILLS

Life & Career Skills

- Flexibility & Adaptability
- Initiative & Self-Direction
- Social & Cross-Cultural Skills
- Productivity & Accountability
- Leadership & Responsibility

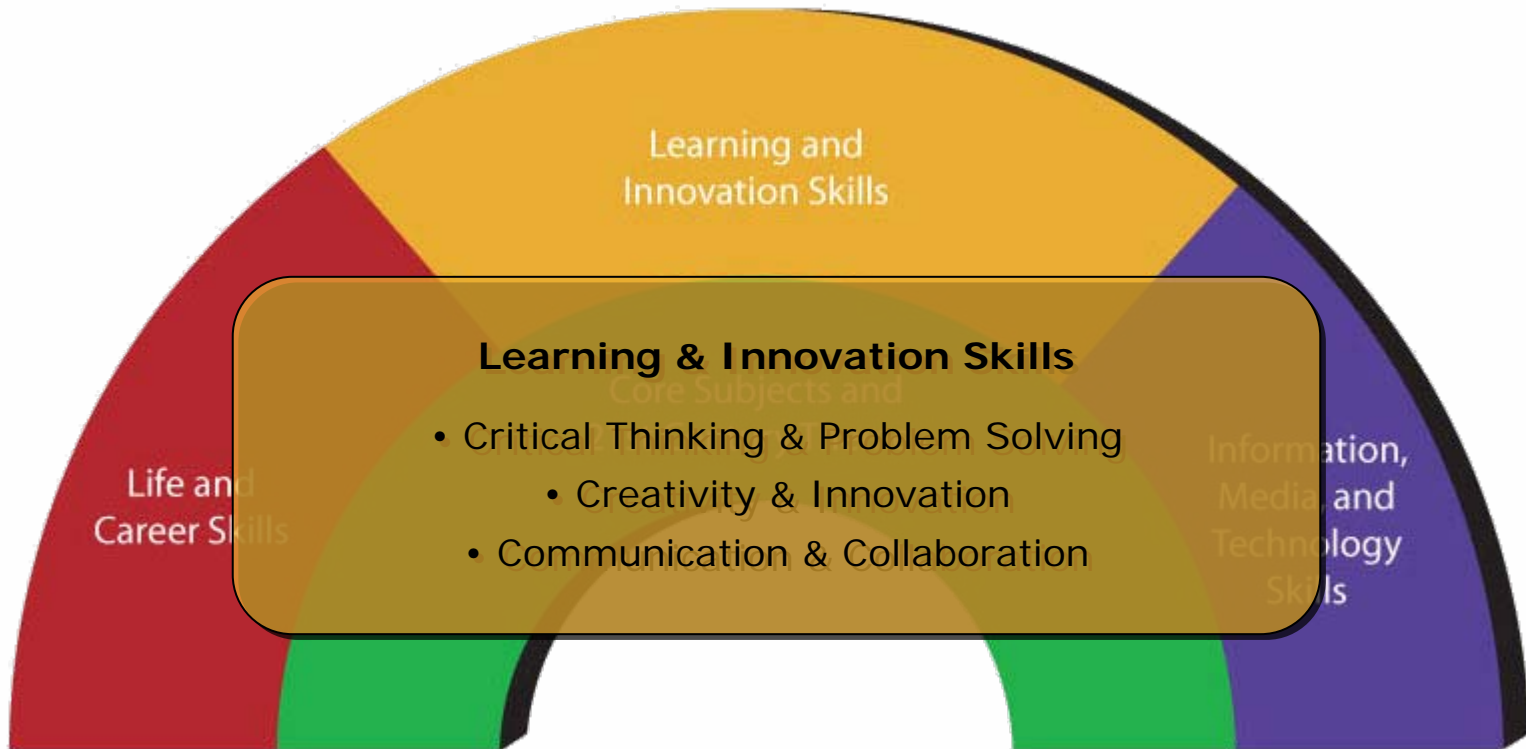
Life and
Career Skills

Information,
Media, and
Technology
Skills

The P21 Framework

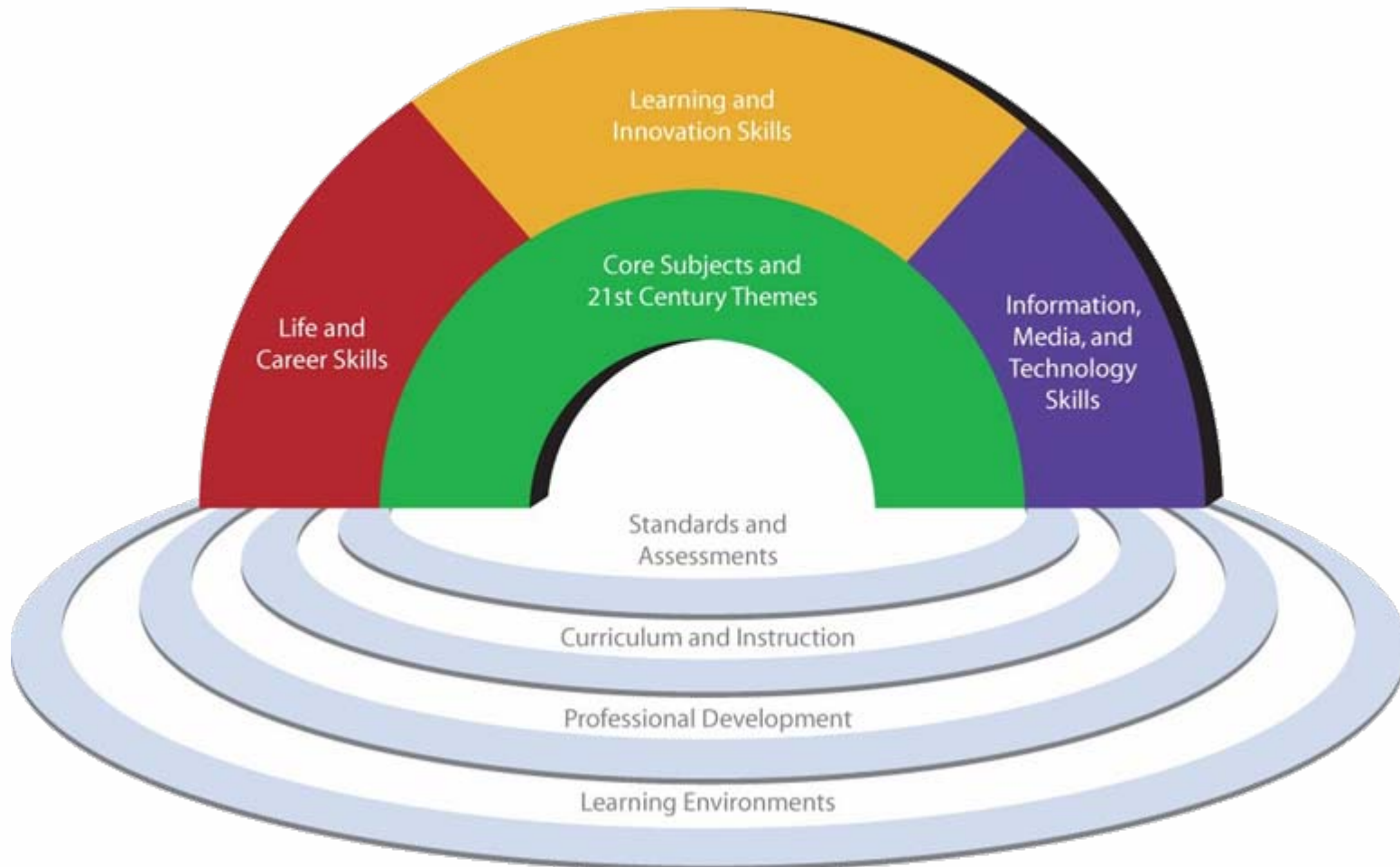


PARTNERSHIP FOR
21ST CENTURY SKILLS



21st Century Skills Framework

21st Century Student Outcomes and Support Systems



Conclusion

Are your students:

- Problem solvers?
- Good communicators?
- Good collaborators?
- Information and technology literate?
- Innovative and creative?
- Globally competent?
- Financially literate?
- Critical thinkers?



Conclusion



Are our students ready for
the new global economy?

Why We Need Better Critical Thinking



The Financial Meltdown



The Challenger Explosion



September 11...



Enron

...and many more

21st Century Skills

We're in a time of great change...



...with no road-map.

Economic Propositions



- We need an educated population that can deal with issues beyond than the mass reproduction of products
- Need to be able to think clearly

The 21st Century Corporation



- Flatter organizations
- Companies expect workers to act and react across the board
- Speed and flexibility
- Workers need to think like a CEO
- What is the mission and the vision of the organization?

Global Competition

- Program for International Student Assessment (PISA) exam
 - American students repeatedly score lower than international students
- International students focus on critical thinking, problem solving, and applied learning
- American students focus on rote memorization

“In the 21st century,
the real coin of the
realm is, **can
students look at
material they never
have seen before
and know what to
do with it?**”

- Dr. John Bransford



Assessing Critical Thinking

It's easier to measure rote learning than critical thinking

BUT if we are controlled by the cheapest option, the rest
of the world will pass us by.

Critical Thinking is the Foundation for Many Key Skills



Critical Thinking for Business

What does critical thinking mean
in terms of business?

Critical thinking for everybody

- Every worker needs to be able to think critically
- What is the value you add to the company?
 - The key to surviving the work world
- Even at the cash register, critical thinking for:
 - Crisis management
 - Customer service

What is the big picture?

- Everyone makes a contribution
- At Dell, 40% of productivity improvement came from the people doing the online assembly
- Improvement starts from the bottom up



What can we do?

Challenge Learning

Projects

Problem Solving

Real World Situations

What can we do in schools?

We need to be intentional and purposeful

- Students need to aspire to critical thinking
- Teach problem-solving
- Project/challenge based learning
- Self-direction

Challenge Learning

Projects

Problem Solving

Real World Situations

Self-management



“At Apple, if somebody needs to be managed, they’re no longer employable.”

Agile Critical Thinking™



- Action oriented
- Real World Situations
- Taught Using On-line Social Learning

Teaching Critical Thinking

- Many, many examples
- Must understand the domain to work within
 - Ex. Healthcare thinking is different from IT
- How to influence the use of ideas
- Peer-mediation as mentoring
 - Social media, computing, 21st century technology

Emphasizing 21st Century Skills...



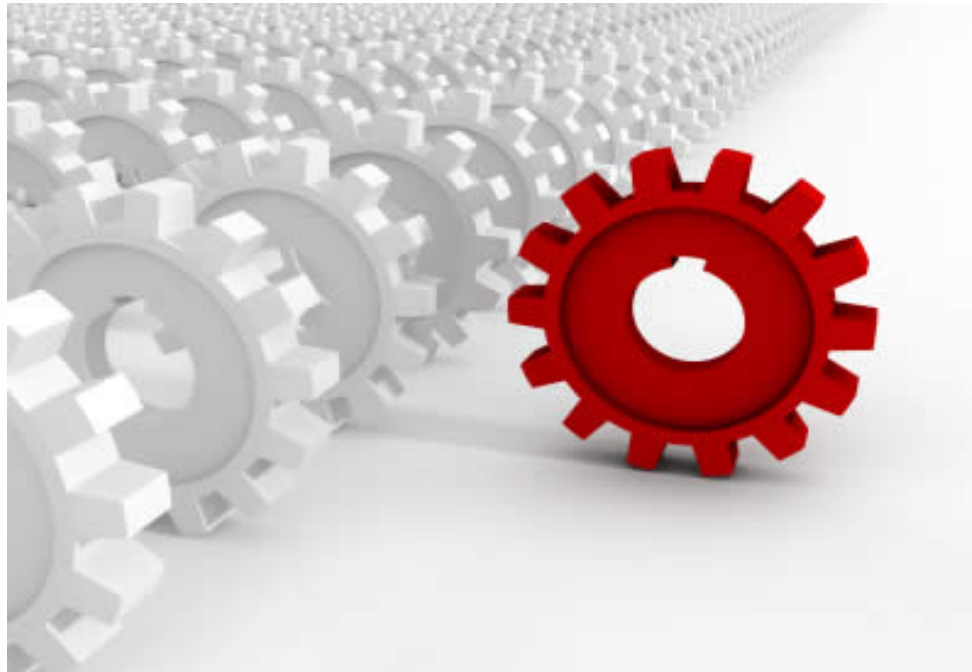
In the Schools



In the Workplace

Teaching Critical Thinking

We need to be on a continuous improvement cycle in a global context in which everybody is headed in this direction, or must be to compete in the global race.



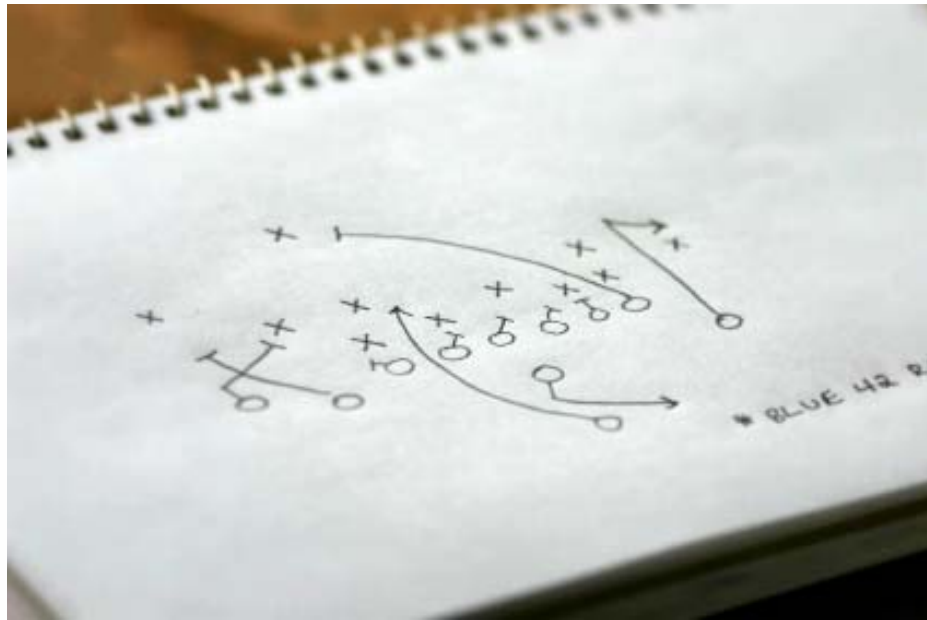
It's not a question of
content OR skills



But of
content AND skills

Do Everything!

Need a fusion of content and skills



Punt, pass, and kick AND read the playbook!

Technology

- Content is not all that's important
 - More than turning on the machine
- How to use technology to:
 - Critically think
 - Communicate
 - Problem solve
 - Collaborate





It's not just about teaching people to **use technology** but getting people to understand how to **innovate with technology**

Curiosity



- How are things different? How are things working?
 - These are the keys to moving forward

Curiosity

Motivation

Drive

Self-Direction



- **Curiosity should be encouraged**
- **Young people are not taught to define the next step on their own**
- **What are we doing in our culture to encourage this?**

Essential Skills for the 21st Century Workplace



Ken Kay

The Partnership for
21st Century Skills



PARTNERSHIP FOR
21ST CENTURY SKILLS



Ed Reilly

American
Management
Association



Charlie Kreitzberg

Cognetics
Corporation



AMA Solution

Critical Thinking

Seminar #2533

- Be able to use critical thinking skills when making business decisions and taking action
- Select specific techniques to improve how you recognize assumptions, evaluate arguments or draw conclusions
- Know how to take abstract ideas and make them more tangible
- Be more aware of how emotion, time pressure, style and limited resources affect your thought processes and decisions

Use Promo Code: **LCVA** for \$100 Discount

(you must register before April 9, 2010)

www.amanet.org or 1-800-262-9699

Webinars

- **March 18: Ignite Your Creative Spark: Tapping Your Intuition to Spot and Seize Opportunities**
- **March 23: How to Motivate and Engage Your Employees Without Spending a Dime**
- **March 25: How to Write a Darn Good Email**
- **April 06: How to Exert Your Authority to Lead: 12 Steps to Power Presence**
- **April 08: How to Be a Successful Manager as an Introvert**
- **April 15: 7 Fatal High-Stakes Presentation Traps and How to Avoid Them**

Follow us on  @AMANET for the latest updates on AMA Webinars, Webcasts, and Podcasts



For details and registration, visit: www.amanet.org/events

Questions and Answers

www.amanet.org