

2. USING 21ST CENTURY SKILLS & LITERACIES TO ACHIEVE 21ST CENTURY LEARNING OUTCOMES/FLUENCIES

©Literacies for the Digital Age to Teach in the K-12 Classroom

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QUOTE: ALVIN TOFFLER

- “The illiterate of the 21st Century will not be the ones who cannot read and write, but those who cannot learn, unlearn, and relearn.”

<http://www.slideshare.net/langwitches/21st-century-skills-literacies-fluency>

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WHAT SHOULD BE THE OUTCOME OF 21ST CENTURY LEARNING FOR K-12 STUDENTS?

- K-12 students need to develop multiple **FLUENCIES** as learning outcomes for the 21st Century.
- What is meant by the term “**FLUENCY**” [noun]?
<http://www.thefreedictionary.com/fluency>
 - **1.fluency** - powerful and effective language;
 - **2. fluency** - the state of being cognitively skillful
- How can K-12 students achieve the **FLUENCIES** that they need for the 21st Century?



CONNECTEDNESS AMONG SKILLS, LITERACIES, AND FLUENCIES

<http://www.slideshare.net/langwitches/21st-century-skills-literacies-fluency>



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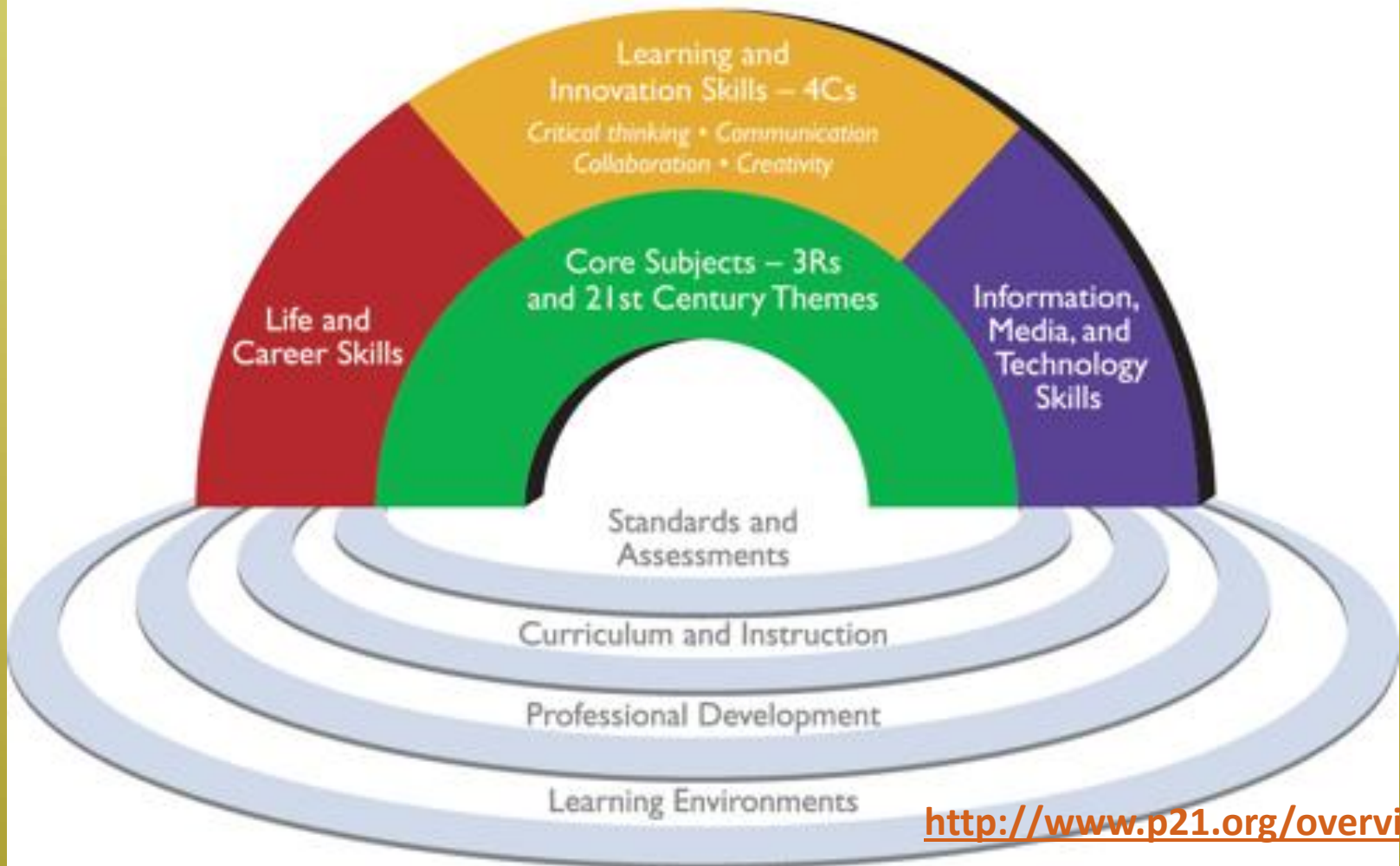
FRAMEWORK FOR 21ST CENTURY LEARNING

<http://www.p21.org/overview/skills-framework>

- “The Framework presents a holistic view of 21st century teaching and learning that combines a discrete focus on 21st century student outcomes** (a blending of specific skills, content knowledge, expertise and literacies) with innovative support systems to help students master the multi-dimensional abilities required of them in the 21st century.”

**the term outcomes is used interchangeably here as fluencies [LGS]

21st Century Student Outcomes and Support Systems



21st CENTURY SKILLS

WHAT ARE 21ST CENTURY SKILLS?

<http://www.thoughtfullearning.com/resources/what-are-21st-century-skills>

- “The 21st century skills are a set of abilities that students need to develop in order to succeed in the information age. “
- Abilities cited by *The Partnership for 21st Century Skills* include: [<http://www.p21.org/overview>]
 - **Core Subjects (the 3 Rs)**
 - **Life and Career Skills**
 - **Learning and Innovation Skills**
 - **Information, Media, and Technology Skills**

(LITERACY SKILLS)

21st CENTURY LEARNING SKILLS, Also Known as 4 C's

<http://www.thoughtfullearning.com/resources/what-are-learning-skills>

- **CRITICAL THINKING:** Analyzing, Arguing, Classifying, Comparing and contrasting, Defining, Describing, Evaluating, Explaining, Problem solving, Tracking cause and effect
- **CREATIVE THINKING:** Brainstorming, Creating, Designing, Entertaining, Imagining, Improvising, Innovating, Overturning, Problem solving, Questioning
- **COMMUNICATING:** Analyzing the situation, Choosing a medium, Evaluating messages, Following conventions, Listening actively, Reading, Speaking, Turn taking, Using technology, Writing
- **COLLABORATING:** Allocating resources, Brainstorming, Decision-making, Delegating, Evaluating, Goal setting, Leading, Managing time, Resolving conflicts, Team building

Preparing 21st Century Students for a Global Society
An Educator's Guide to the "Four Cs"

<http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf>

- **“The ‘21st Century Skills’ movement is more than a decade old. Yet, educators still pose important questions about how to move 21st century education forward. NEA has been an advocate of the 21st century education movement from its inception and wants to empower educators to move it forward in their own practice.” [P.3]**
- **“This guide includes ideas and resources that will help advance the “Four Cs” in classroom practices. These resources include practical techniques to integrate the “Four Cs” in the classroom setting; tools for developing better proficiency in technology; and methods to ensure that students are learning in a meaningful context. It also offers suggestions for you to encourage your department, school, district, and state to embrace the “Four Cs.”**

21ST CENTURY LIFE SKILLS

<http://www.thoughtfullearning.com/resources/what-are-life-skills>

- “Life skills equip students to thrive in the classroom and in the world beyond.”
- They include:
 - FLEXIBILITY
 - INITIATIVE
 - SOCIAL SKILLS
 - PRODUCTIVITY
 - LEADERSHIP

21ST CENTURY LITERACY SKILLS

<http://www.thoughtfullearning.com/resources/what-are-literacy-skills>

- “Literacy skills help students gain knowledge through reading as well as using media and technology. These skills also help students create knowledge through writing as well as developing media and technology.”
 - INFORMATION LITERACY
 - MEDIA LITERACY
 - TECHNOLOGY LITERACY

The Partnership for 21st Century Skills [P21]

http://www.p21.org/overview/p21-faq#what_partnership

- **“P21 is a national organization that advocates for 21st century readiness for every student.**
- **P21 is a broad coalition made up of education nonprofits, foundations, and businesses working together to make 21st century education a reality for all students.**
- **As the United States continues to compete in a global economy that demands innovation, P21 and its members provide tools and resources to help the U.S. education system keep up by fusing the 3Rs and 4Cs (critical thinking and problem solving, communication, collaboration, and creativity and innovation).**
- **While leading districts and schools are already doing this, P21 advocates for local, state and federal policies that support this approach for every school. “**

The Partnership for 21st Century Skills [P21]

http://www.p21.org/overview/p21-faq#what_partnership

MEMBERS OF THE PARTNERSHIP FOR 21ST CENTURY SKILLS

Crayola	National Board for Professional Teaching Standards
Destination Imagination	NEA National Education Association
EdLeader 21	Pearson Foundation
EF Education First	unicef united states fund
Ford Motor Company fund and Community Services	The Walt Disney Company
Intel	National Board for Professional Teaching Standards

**DIGITAL AGE LITERACIES
THAT GO BEYOND
THE PARTNERSHIP FOR
21ST CENTURY SKILLS**

Institute of Museum and Library Services [IMLS]

http://www.imls.gov/about/21st_century_skills_list.aspx

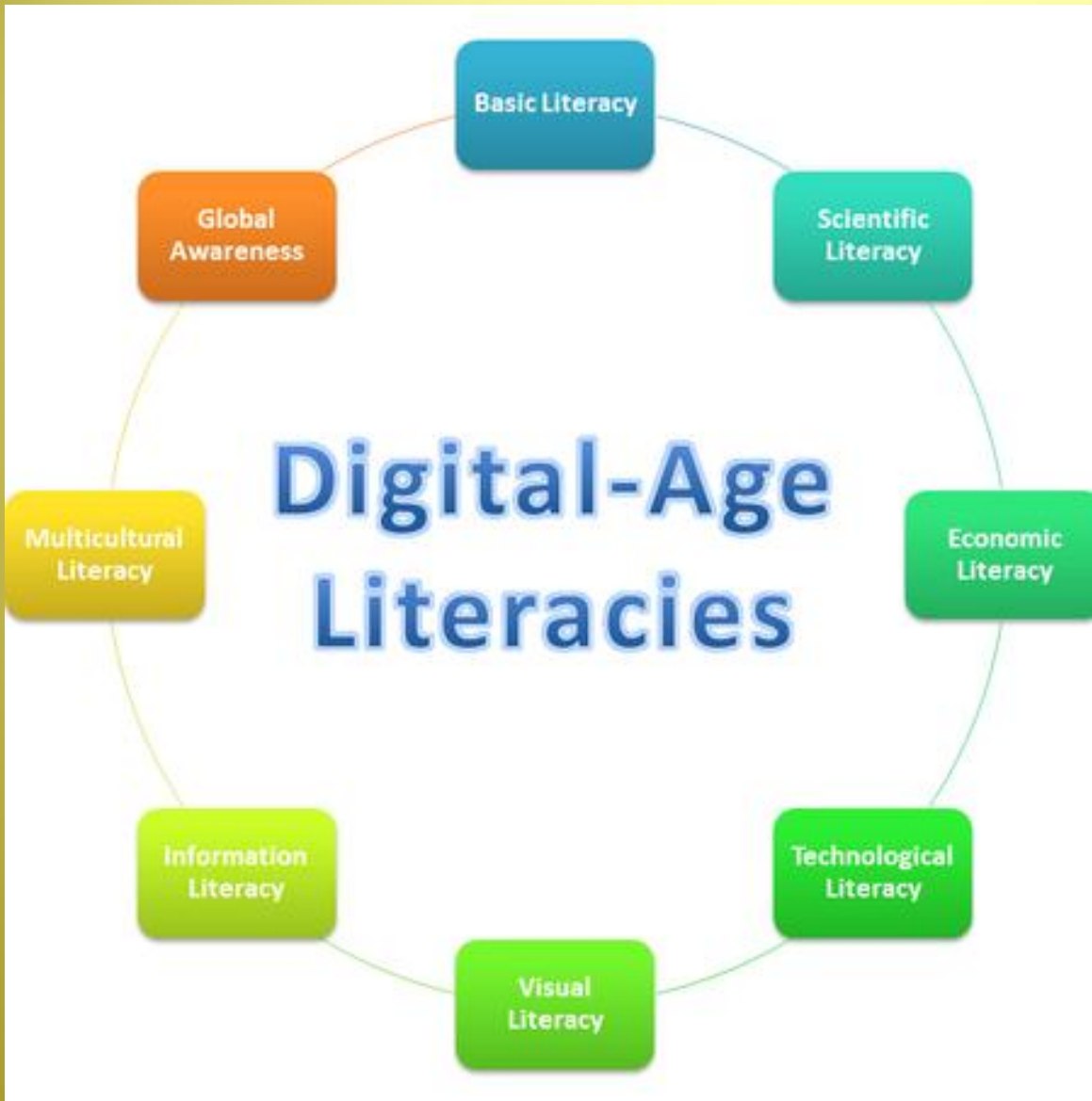
21st Century Skills and Literacies Definitions

- “The IMLS Project Team and Task Force considered the list of skills commonly referred to as ‘21st Century Skills’ and modified it slightly to better align with library and museum priorities.”
- “The resulting list includes the following additions: Basic Literacy, Scientific & Numerical Literacy, Visual Literacy, Cross-Disciplinary Skills, and Environmental Literacy.”

National Council of Teachers of English's [NCTE] Definition of 21st Century Literacies

<http://www.ncte.org/governance/literacies> **

- “Because technology has increased the intensity and complexity of literate environments, the twenty-first century demands that a literate person possess a wide range of abilities and competencies, many literacies. These—are multiple, dynamic, and malleable.”
 - Develop proficiency with the tools of technology
 - Solve problems collaboratively and cross-culturally
 - Design and share information for global communities
 - Manage multiple streams of simultaneous information
 - Create, critique, analyze, and evaluate multi-media texts
 - Attend to the ethical responsibilities
- ** Modified version. See source citation for full statement.



<http://purposefultechology.weebly.com/how-can-we-embed-digital-literacy-in-the-classroom.html>

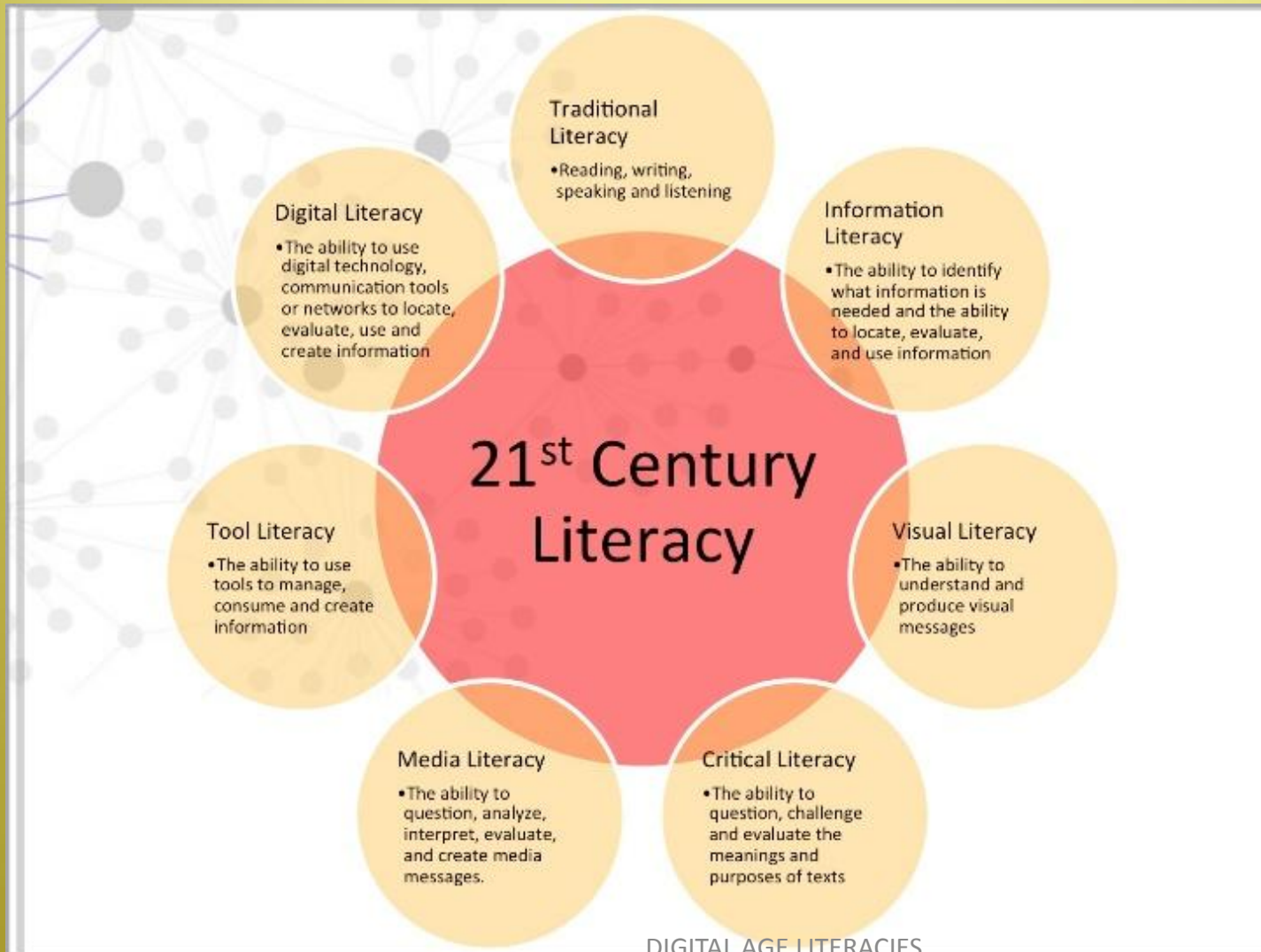
**START AT 1. READ
DIAGRAM CLOCKWISE,
USING THE NUMBERS
BELOW**

1. BASIC LITERACY
2. SCIENTIFIC LITERACY
3. ECONOMIC LITERACY
4. TECHNOLOGICAL LITERACY
5. VISUAL LITERACY
6. INFORMATION LITERACY
7. MULTICULTURAL LITERACY
8. GLOBAL AWARENESS

DANIEL CHURCHILL'S LITERACIES from
*“LEARNING TECHNOLOGY: YESTERDAY, TODAY,
TOMORROW”*

- TRADITIONAL
- INFORMATION
- VISUAL
- CRITICAL
- MEDIA
- TOOL
- DIGITAL

“Learning Technology: Yesterday, Today, Tomorrow”



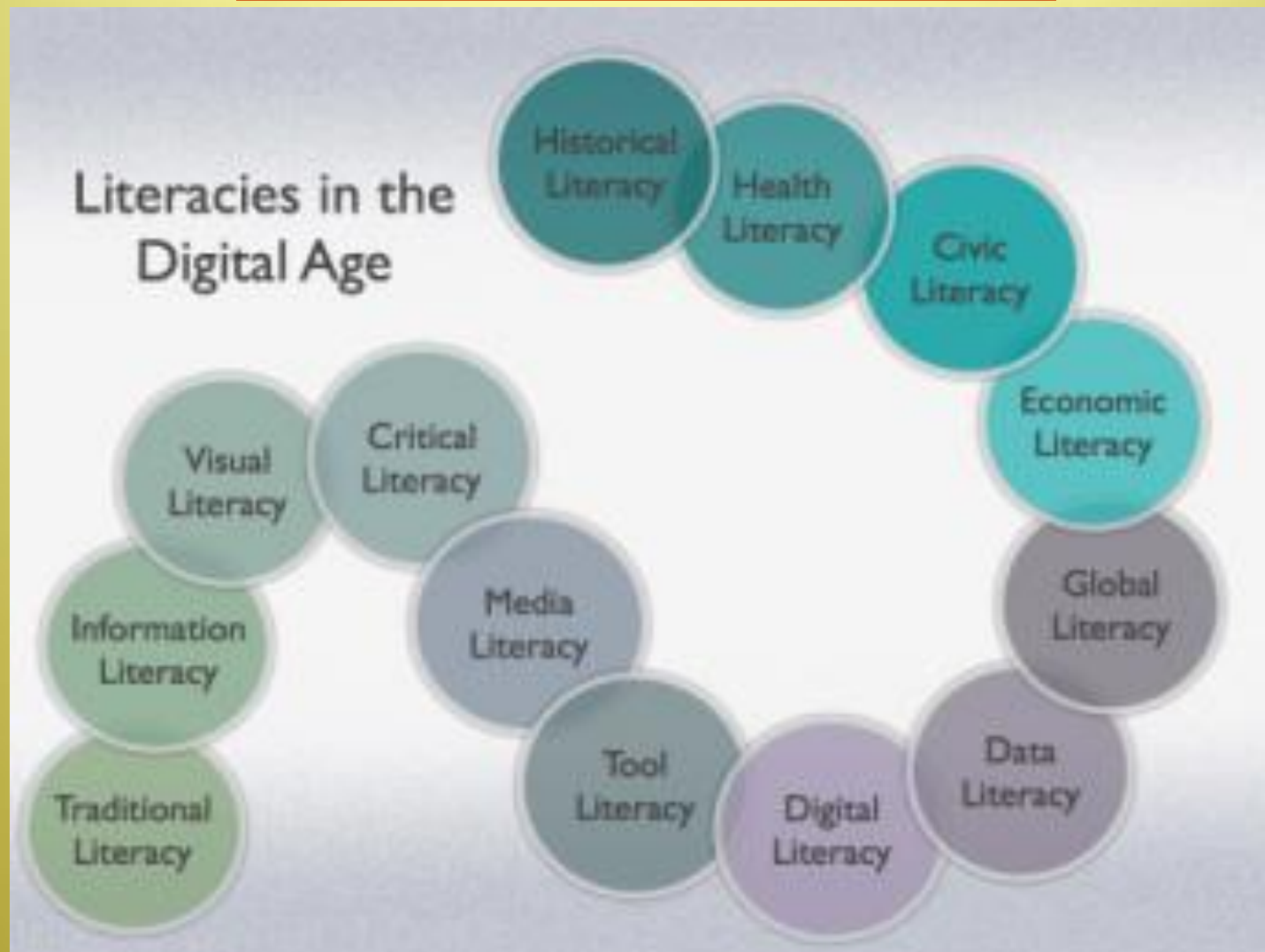
Daniel
Churchill
The
University of
Hong Kong

<http://www.slideshare.net/zvezdan/new-literacy-in-the-web-20-world>

<http://www.slideshare.net/zvezdan/>

<http://www.schrockguide.net/literacy-in-the-digital-age.html>

Kathy Schrock's Guide to Everything



OVERVIEW OF DIGITAL AGE LITERACIES DEMONSTRATED IN KATHY SCHROCK'S PPTs

- http://www.schrockguide.net/uploads/3/9/2/2/392267/literacy_defintions.pdf 13 SLIDES THAT DEFINE THE VARIOUS LITERACIES, BASED ON A VARIETY OF SOURCES.
- http://www.schrockguide.net/uploads/3/9/2/2/392267/digital_literacy_0612.pdf
- 156 SLIDES THAT PROVIDE EXAMPLES OF EACH OF THE LITERACIES FOR THE DIGITAL AGE.

MULTIPLE VIEWS IDENTIFYING DIGITAL AGE LITERACIES

READ EACH ROW ACROSS

TRADITIONAL C & S	INFORMATION C & S; IMLS	VISUAL C & S; IMLS	CRITICAL C & S
MEDIA C & S; NCTE; IMLS	TOOL C & S; NCTE; IMLS	DIGITAL C & S	DATA S
GLOBAL S & NCTE; IMLS	ECONOMIC S; IMLS	CIVIC S; IMLS	HEALTH S; IMLS
HISTORICAL S	SCIENTIFIC IMLS	ENVIRONMENTAL IMLS	

21ST CENTURY SKILLS SOURCES

- <http://www.p21.org/> The Partnership for 21st Century Skills is a national organization that advocates for 21st century readiness for every student.
- <http://pict.sdsu.edu/engauge21st.pdf> enGauge® 21st Century Skills: Literacy in the Digital Age, “The definition of student achievement must be broadened to include the 21st century skills that will be required for students to thrive in the future” (p. 1).
- <http://www.slideshare.net/langwitches/21st-century-skills-literacies-fluency> 21st Century Skills, Literacies & Fluency by Silvia Rosenthal Tolisano, Educational Consultant GloballyConnectedLearning.com
Langwitches.org/blog
- <http://www.egs.edu/library/alvin-toffler/biography/> ALVIN TOFFLER-BIOGRAPHY , The European Graduate School (EGS); His writings on futurism address communication, digitalization, and corporate expansion. *The Financial Times* declared him “world’s most famous futurologists.”
- <http://purposefultechology.weebly.com/how-can-we-embed-digital-literacy-in-the-classroom.html> Circle diagram of Digital-Age Literacies

21ST CENTURY SKILLS SOURCES

- <http://www.thoughtfullearning.com/resources/what-are-learning-skills> What are learning skills? [the 4Cs]; Thoughtful Learning, Burlington Wisconsin
- http://www.ncte.org/library/NCTEFiles/Resources/Positions/Framework_21stCent_Curr_Assessment.pdf NCTE Framework for 21st Century Curriculum and Assessment, Updated February 2013, Adopted by the NCTE Executive Committee November 19, 2008.
- <http://www.edutopia.org/blog/twenty-first-century-literacy-deeper-learning-rebecca-alber> Deeper Learning: Defining Twenty-First Century Literacy, edutopia, JANUARY 21, 2013 | [REBECCA ALBER](#)
- http://www.schrockguide.net/uploads/3/9/2/2/392267/digital_literacy_0612.pdf LITERACY FOR THE DIGITAL AGE Kathy Schrock