Defining 21st Century Literacy

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Defining 21st Century Literacy: Key Ideas

- Digital age has changed the way we interact with information (& each other).
- Literacy has been redefined.
- These changes dramatically alter the landscape of teaching and learning.
Literate ~ knowledgeable and educated in a field

Literacy ~ Ability to read, spell and to communicate through written language.

Asymmetry of mass media

Easier to read a book than write one

Book publishing - first of mass media

Information gatekeepers

- Newspapers
- Recordings
- Films
- Radio
- Television

www.wordle.net
These *information gatekeepers* broadcast a one-way flow of information to a *mass audience*.

This information flow was tied to an industrial mode of production. A few *skilled/creative* people to *innovate* and *manage*. Large numbers of *workers literate enough* to follow *routine procedures*.

**Schools developed as information centers. Teachers functioned as “decentralized gatekeepers.”**

**Characteristics of print information**

- It is a thing.
- It has a logical place where it can be found.
- Managing information is managing categories.
Teachers “knew” the information.

Students “got” it from teachers and “learned” it.

From an American high school student:

“I could memorize very easily, and became valedictorian.

But I was embarrassed that I understood much less than some other students who cared less about grades.

I felt that my brain was a way station for material going in one ear and (after the test) out the other.”

~ High School Student quoted in Wiggins and McTighe Understanding by Design

Time Magazine 1994

“The internet will never go mainstream, because it’s not designed for doing commerce.”

20 years of the digital age

- **Memory:** cheaper
- **Hardware:** smaller
- **Networked:** Fiber optic and wireless
- **Web Platform:** Adopted as the standard
When information is digitized it becomes Fluid.

There is no bottom or top on the internet.

User-friendly production
- Fosters a bottom-up information flow.
- We can be creators as well as consumers of content.

New "digital age"

Personal:
- You can gather information, content, and entertainment.

Collaborative:
- Created new digital communities - linking you to people who share your interests.

New "digital age"
Information is everywhere. It’s not “what” you know, it’s what you can do with it.

Digital age “devalues” lower order skills.

Bloom’s Lower - Order Skills
- Applying - using information in a new setting
- Understanding - explaining idea or concept
- Remembering - recalling information

The Digital Age’s Impact on:
Bloom’s Taxonomy of Thinking Skills
- Creating - generating new ideas
- Evaluating - justifying a decision or choice
- Analyzing - breaking into component parts
- Applying - using information in a new setting
- Understanding - explaining idea or concept
- Remembering - recalling information

Digital age gives students access to information and higher order thinking tools.

Bloom’s Higher-Order Skills
- Creating - generating new ideas
- Evaluating - justifying a decision or choice
- Analyzing - breaking into component parts
“Creativity, innovation, and flexibility will not be the special province of an elite. It will be demanded of virtually everyone who is making a decent living.”

“Search is highly personal and empowering. It's the antithesis of being told or taught.” ~ Eric Schmidt, Google CEO

“Literacy in the 21st century will mean the ability to:
find information,
decode it,
critically evaluate it,
organize it into personal digital libraries,
and find meaningful ways to share it with others.
~ David Warlick

How has the digital age redefined literacy?
Literacy is ... decoding it, critically evaluating it

Literacy is ... organizing it into personal digital libraries

Literacy is ... finding meaningful ways to share it with others

Social Networking Sites

What happens to schools when life’s become an open book test?
New technologies have put students in charge of the information they access, store, analyze and share.

Impact of new technology on students:
- They won't be a passive audience.
- Can't broadcast at them.
- They expect control and functionality.

the old communications model ... Monologue

the NEW communications model ...

...Dialogue
Students are using new digital media to share their creativity with the world.

What can schools do to support learning in the digital age?

Literacy in the 21st century will mean the ability to:
- **find** information,
- **decode** it,
- **critically evaluate** it,
- **organize** it into personal digital libraries,
and find meaningful ways to **share** it with others.

~ David Warlick

Align instruction with new information literacy skills

Monitor the information flow and thinking in the classroom

- How is **information flowing** through the class?
- What level of **thinking skills** are students using?
- How do students **share** what they’ve learned?
- Who is the **audience**?
- What is the **purpose**?
Digital age motivates students with choices

#1 factor for improving student motivation is choice.

Not whether the student does the assignment, but how they engage in the work.

~Doug Reeves

<table>
<thead>
<tr>
<th>Traditional Writing is Assigned</th>
<th>Writing Assigned with Choice</th>
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<tbody>
<tr>
<td>Students are asked to write only on the teacher's topics.</td>
<td>Students can develop topics that matter to them.</td>
</tr>
<tr>
<td>Student writes for the teacher.</td>
<td>Audience and purpose for writing is identified.</td>
</tr>
<tr>
<td>Teacher grades their writing.</td>
<td>Students are asked to reflect on their growth.</td>
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</tbody>
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My workshops will focus on three instructional strategies

- **Defining:** negotiating meaning
- **Summarizing:** synthesis and judgment
- **Comparing:** assessing similarities and differences

Move teacher from dispensing information to *instructional designer*

- **Rigor** - analyzing, evaluating, creating
- **Relevance** - students select their strategy
- **Reflection** - student evaluates their progress

Product that asks students to communicate their thinking
What skills will the 21st century workplace require?
- Literacy
- Numeracy
- Self-discipline

Creativity and adaptability, they must be flexible independent learners.

Our students will also need marketable “soft skills”
- Problem-solving
- Collaboration
- Communicating
- Networking

Our goal – students who will be able to function in an unpredictable world.

Learn to research, think, problem-solve and write like a
- scientist, engineer, coach, artist, historian, writer, mathematician, musician ....