

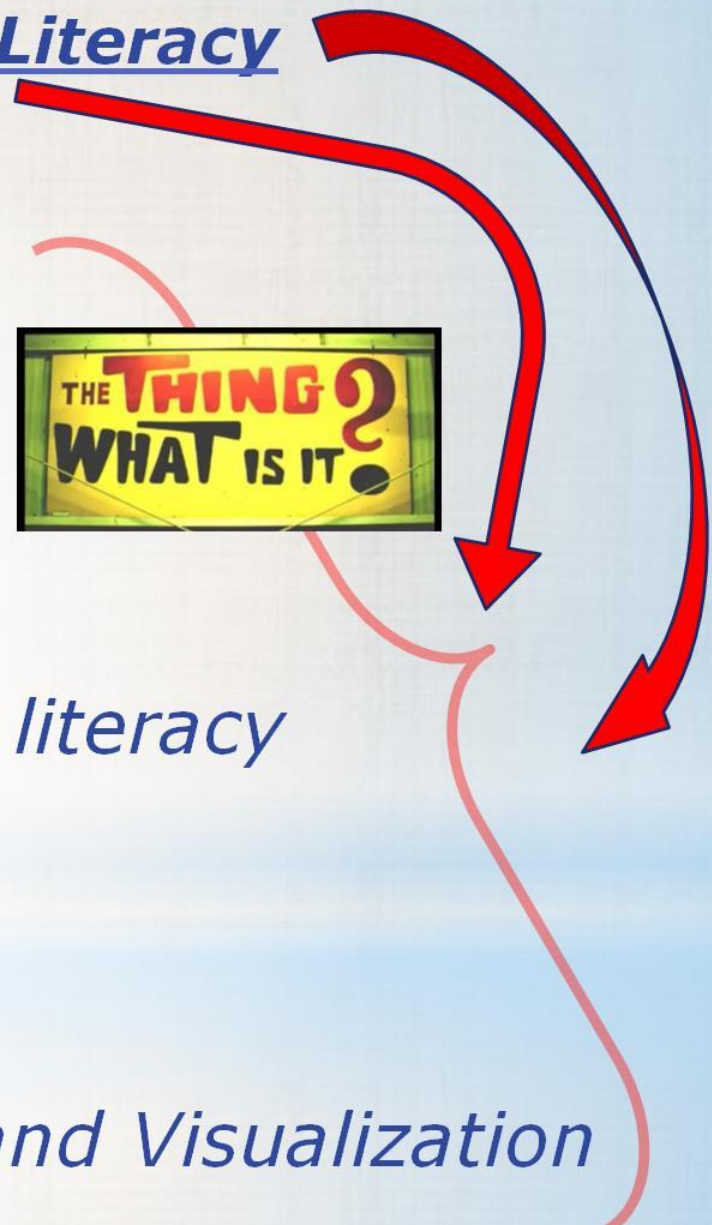
Information and Communication Technologies
Media and Information Literacy

Information and Communication Technologies

Media-Information Literacy

Purpose of the Course

- *Understanding information*
- *Information society*
- *Information and Computer literacy*
- *Processing information*
- *Dealing with information*
- *Methods for Data Analysis and Visualization*



Information and Communication Technologies

Media-Information Literacy

Structure of the course

- *Introduction to ICT and MIL:
general ideas and philosophical concepts*
- *A set of theoretical and practical problems
aiming to development of practical skills*
- *Basics of math methods for data analysis
(interpolation and approximation methods)*
- *Practical tasks*
- *Visualization of data*

ICT + MIL

Rating system

Activity	Credit /points/
Giving explanation on a problem	3
Giving a talk on a special subject	3
Completing a set of exercises	12
Giving explanation on a problem from Homework	2
Home test work	10

Conversion

Total Score	Grade
55 - 100	Pass

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Media-Information Literacy

- Part I. Introduction:

general ideas & MIL concept

Subject and Structure of the Informatics

Informatics – field of science, studying laws and methods of information processing

→ **It forms:**

1) **Definitions for other scientific fields**

2) **Base and Principles of:**

- **information processing,**

- **application of Computing Technologies and Information Technologies for solving practical problems**

→ **Special Subjects in CS:**

1) **Theoretical computer science/Foundations of Information Science**

2) **Architecture of Computer & Computing Technologies**

3) **Programming**

4) **Information Systems & Technologies**

5) **Artificial Intelligence**

6) **Development and implementation of math methods and models**

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Media-Information Literacy

Some definitions...

- *Media*
- *Multi-Media*
- *(Multi-)media-information Literacy*
 - *Conceptual aspects*
 - *Practical aspects*

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Media-Information Literacy

Some definitions...

Media 

tools used to store and deliver information or data

➤ *Examine the Wiki page for media:*

- **Media (communication)**, tools used to store and deliver information or data
 - **Advertising media**, various media, content, buying and placement for advertising
 - **Broadcast media**, communications delivered over mass electronic communication networks
 - **Digital media**, electronic media used to store, transmit, and receive digitized information
 - **Electronic media**, communications delivered via electronic or electromechanical energy
 - **Hypermedia**, media with hyperlinks
 - **Interactive media**, media that is interactive
 - **Mass media**, all means of mass information and communication
 - **MEDIA Programme**, a European Union initiative to support the European audiovisual sector
 - **Multimedia**, communications that incorporate multiple forms of information content and processing
 - **New media**, the combination of traditional media and computer and communications technology
 - **News media**, mass media focused on communicating news
 - **Print media**, communications delivered via paper or canvas
 - **Published media**, any media made available to the public
 - **Recording medium**, devices used to store information
 - **Social media**, media disseminated through social interactions

The term refers to components of the mass media communications industry, such as:

- print media,
- publishing,
- the news media,
- photography,
- cinema,
- broadcasting (radio and television),
- advertising.

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Media-Information Literacy

Some definitions...

Multi-Media

communications that incorporate multiple forms of
information content and processing



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Media-Information Literacy

Some definitions... **(Multi-)media-information Literacy**

- Media and Information Literacy (MIL) is a “combination of knowledge, attitudes, skills, and practices required to access, analyze, evaluate, use, produce, and communicate information and knowledge in creative, legal and ethical ways that respect human rights”

(Moscow Declaration on Media and Information Literacy, 2012).

- The United Nations Educational, Scientific, and Cultural Organization (UNESCO) defines it as the “set of competencies to search, critically evaluate, use and contribute information and media content wisely; knowledge of one’s rights online; understanding how to combat online hate speech and cyberbullying; understanding of the ethical issues surrounding the access and use of information; and engage with media and ICTs to promote equality, free expression, intercultural/interreligious dialogue, peace, etc.”

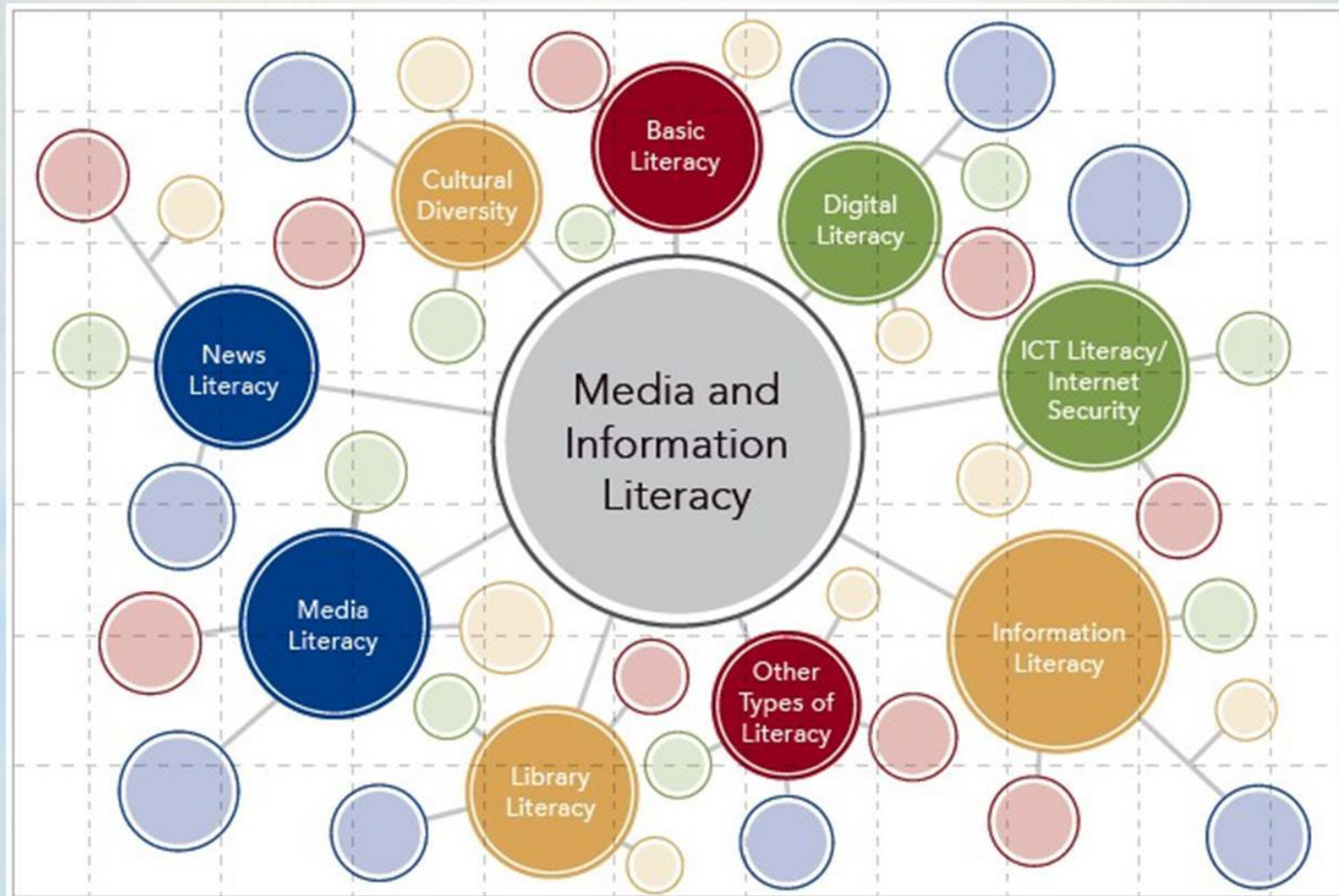
(UNESCO, 2016). 10

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Media-Information Literacy

Conceptual aspects

Here some philosophic concept to be disclosed



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Media-Information Literacy

Conceptual aspects

Information and media literacy Wiki page

Here some philosophic concept to be disclosed

- MIL is a combination of information literacy and media literacy. The purpose of being information and media literate is to engage in a digital society; one needs to be able to understand, inquire, create, communicate and think critically. It is important to effectively access, organize, analyze, evaluate, and create messages in a variety of forms.^[8] The transformative nature of MIL includes creative works and creating new knowledge; to publish and collaborate responsibly requires ethical, cultural and social understanding.

Literacy is about more than reading or writing -it is about how we communicate in society. It is about social practices and relationships, about knowledge, language and culture.

UNESCO, Statement for the United Nations Literacy Decade, 2003-2012

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Media-Information Literacy

Conceptual aspects

Information and media literacy Wiki page

Here some philosophic concept to be disclosed

- Traditionally, teachers have been the experts sharing their knowledge with children. Technology, and the learning tools it provides access to, forces us to change to being facilitators of learning. We have to change the stereotype of teacher as the expert who delivers information, and students as consumers of information, in order to meet the needs of digital students. Teachers not only need to learn to speak digital, but also to embrace the language of digital natives. *Hence, we need new teaching concepts.*

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Teaching Concepts

Examples:

- *Education 3.0*
- *Jigsaw (teaching technique)*
- *Learning by teaching*
- *Massive open online course*
- *Rotation model of learning*
- *Screencast-O-Matic*
- *Use of specific educational software*
- *The Flipped Classroom*

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Teaching Concepts

The Flipped Classroom concept

WHAT IS THE FLIPPED CLASSROOM?

The flipped classroom inverts traditional teaching methods, delivering instruction online outside of class and moving “homework” into the classroom.

THE INVERSION

The Traditional Classroom

Teacher's Role: Sage on the Stage



The Flipped Classroom

Teacher's Role: Guide on the Side



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Conceptual aspects

Here some philosophic concept to be disclosed

“Introduction to Media and Information Literacy” by Arniel Ping:

<https://www.youtube.com/watch?v=uCOsDWgfSiM>

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Media-Information Literacy

Conceptual aspects

Here some philosophic concept to be disclosed

- *Information society -vs- Literate society ?*
- *Postliterate society ?*

An **information society** is a society where the creation, distribution, use, integration and manipulation of information is a significant economic, political, and cultural activity. Its main drivers are digital information and communication technologies, which have resulted in an information explosion and are profoundly changing all aspects of social organization, including the economy,^[1] education, health, warfare, government^[2] and democracy.^[3]

The people who have the means to partake in this form of society are sometimes called digital citizens, defined by K. Mossberger as “Those who use the Internet regularly and effectively”. This is one of many dozen labels that have been identified to suggest that humans are entering a new phase of society.^[4]

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Media-Information Literacy

Conceptual aspects

Here some philosophic concept to be disclosed

- *Information society -vs- Literate society ?*
- *Postliterate society ?*

A **postliterate society** is a hypothetical society in which multimedia technology has advanced to the point where literacy, the ability to read or write, is no longer necessary or common. The term appears as early as 1962 in Marshall McLuhan's The Gutenberg Galaxy

A postliterate society might still include people who are aliterate, who know how to read and write but choose not to. Most if not all people would be media literate, multimedia literate, visually literate, and transliterate.

Aliteracy (sometimes spelled alliteracy) is the state of being able to read but being uninterested in doing so.

Transliteracy is 'a fluidity of movement across a range of technologies, media and contexts'.^[1] It is an ability to use diverse techniques to collaborate across different social groups.

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Media-Information Literacy

Conceptual aspects

Concluding using

Media and Information Literacy...*The promise of educational change by Carolyn Wilson*

<http://www.ifapcom.ru/files/News/Images/2012/mil/Wilson.pdf>

What is Media Literacy?

A repertoire of competencies that enable students to understand how the media **operate**, how they **construct meaning**, how they can be **used**, and how to **evaluate** the information they present

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Media-Information Literacy

Conceptual aspects

MIL adds:

- -the identification of an information **need**
- -knowledge of where and how to **access** information
- -knowledge of how to **retrieve information, evaluate, store** and ethically **use** information

External links & resources



Western  Education

CML CENTER FOR MEDIA LITERACY
Mission: Media Literacy

Media and Information Literacy...
The promise of educational change
By Carolyn Wilson

<http://www.ifapcom.ru/files/News/Images/2012/mil/Wilson.pdf>



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Media-Information Literacy

Practical aspects: advanced/scientific user's level

Some practical needs and applications to be mentioned:

- ✓ *Creating information: text, tables, video, audio,...*
- ✓ *Processing information*
- ✓ *Analyzing information (as well using math methods for that)*
- ✓ *Visualizing information:*
 - *Plotting data*
 - *Smoothing, interpolating, approximating data*
 - *Animating data*
- ✓ *Representing (Communicating) information:*
 - *Writing papers*
 - *Creating media-content*
 - *Publishing papers: submission, peer-review, acceptance*
 - *Delivering a talk/poster presentation during a conference*
- ✓ *Being responsible for the information:*
 - *editing/reviewing papers, citing papers*