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for Information Technologies  
in Education

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## The Evolution of MIL: New Tasks or a New Literacy?





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## UNESCO IITE

UNESCO Institute for  
Information  
Technologies in  
Education (IITE) is  
**located in Moscow,**  
Russia

UNESCO **Category 1**  
Institute (since 1997)

**Mission** is to serve as a  
facilitator and enabler in  
promoting ICT for  
achieving SDG #4

**MIL** is one of the focuses  
of activities





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## MIL: UNESCO approach

### Media and information literacy:

- a composite set of knowledge, skills, attitudes, competencies and practices that allow effectively **access, analyze, critically evaluate, interpret, use, create and disseminate** information and media products with the use of existing means and tools on a creative, legal and ethical basis
- a complex concept proposed by UNESCO in 2007
- includes digital or technological literacy
- focuses on different and intersecting competencies to transform people's interaction with information and learning environments online and offline



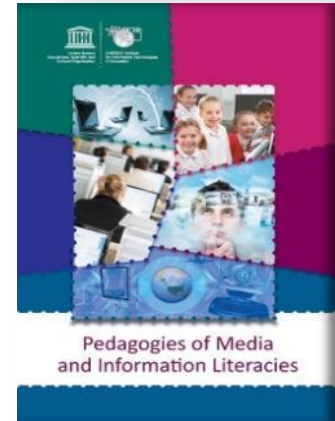
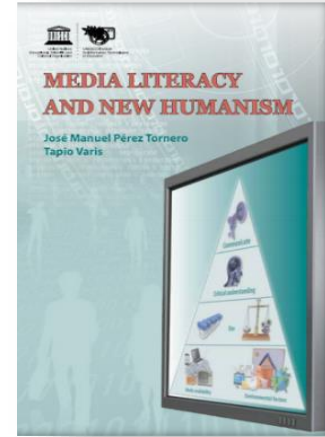
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## UNESCO IITE activities

1. **Professional development of teachers and educators**
  - Localization of the UNESCO MIL Curriculum for Teachers
  - Series of publication (in Russian and English)
  - Development of the e-learning materials on MIL (in Russian and English)
  
2. **Policy advocacy, sensitizing governments to the importance of MIL**
  - Organisation of and participation in MIL-related events in Russia and abroad





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**Cu**

Cultural

**Cg**

Cognitive

**Cn**

Constructive

**Co**

Communicative

# THE 8 ELEMENTS OF DIGITAL LITERACY

**Cf**

Confident

**Cr**

Creative

**Ct**

Critical

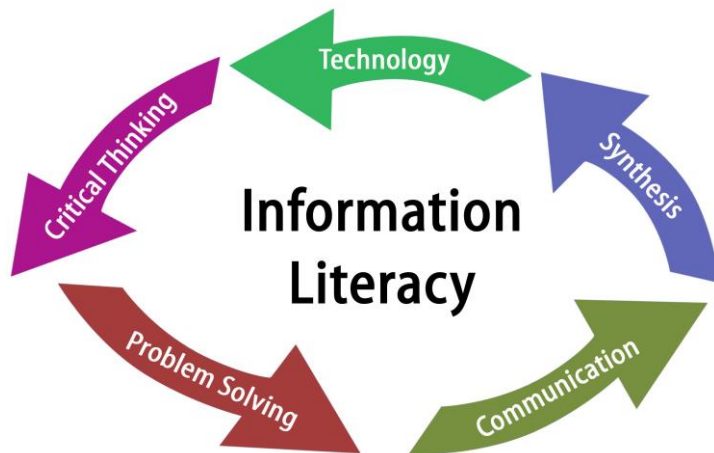
**Ci**

Civic

Adapted from Belshaw, D. (2014). *The Essential elements of digital literacies*. Retrieved from <http://digitalliteracy.es/>



Old (New)  
Challenges



# DIGITAL AND MEDIA LITERACY

A Plan of Action



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## Old (New) Challenges





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## Under the Control of Black Boxes

# Algorithms of digital services

- Establish the nature, ways and formats of our interaction with services
- Work for purposes of their creators / owners
- We use the front end (while the back end uses us)
- ShadowBan, Shadow profiles
- No accountability and no ethics (algorithm for reducing mortality by managing people's nutrition)

“No information technology ever had this depth of knowledge of its consumers — or greater capacity to tweak their synapses to keep them engaged”

Andrew Sullivan, *New York Magazine*



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## Under the Control of Dopamine Rush

# What's behind our information behaviour

- information junkies (“news is to the mind what sugar is to the body”)
- hooked on easily accessible (no efforts needed), promptly available (one click) and immediate (now, but not somewhere down the road) pleasures
- sympathy = likes  
intimacy = comments / friends in common  
social value = reposts
- behavioral design, behavioral economics  
(2017 – Richard Thaler was awarded the Nobel Memorial Prize in Economic Sciences)





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# Under the Control of... Being Humans

- Familiarity = verity
- Illusion of causality
- Authority bias
- Bandwagon effect
- Filtering
- Polarized thinking
- Overgeneralization
- Curse of knowledge
- etc...

# Thinking errors

## 20 COGNITIVE BIASES THAT SCREW UP YOUR DECISIONS

<p><b>1. Anchoring bias.</b> People are over-reliant on the first piece of information they hear. In a salary negotiation, whoever makes the first offer establishes a range of reasonable possibilities in each person's mind.</p> 	<p><b>2. Availability heuristic.</b> People overestimate the importance of information that is available to them. A person might argue that smoking is not safe because they know someone who lived to 100 and smoked three packs a day.</p> 	<p><b>3. Bandwagon effect.</b> The probability of one person adopting a belief increases based on the number of people who hold that belief. This is a powerful form of groupthink and is reason why meetings are often unproductive.</p> 	<p><b>4. Blind-spot bias.</b> Failing to recognize your own cognitive biases is a bias in itself. People with cognitive and motivational biases much more in others than in themselves.</p> 
<p><b>5. Choice-supportive bias.</b> When you discuss something, you tend to feel positive about it, even if that choice has flaws. Like how you think your dog is awesome – even if it bites people every once in a while.</p> 	<p><b>6. Clustering illusion.</b> This is the tendency to see patterns in random events. It is key in various gambling fallacies, like the idea that red is more or less likely to turn up on a roulette table after a string of reds.</p> 	<p><b>7. Confirmation bias.</b> We tend to listen only to information that confirms our preconceptions – one of the many reasons it's so hard to have an intelligent conversation about climate change.</p> 	<p><b>8. Conservatism bias.</b> When people have prior evidence over new evidence or information that has emerged, people are slow to accept that the Earth was round because they maintained that earlier understanding that the planet was flat.</p> 
<p><b>9. Information bias.</b> The tendency to seek information when it does not affect action. More information is not always better. With less information, people can often make more accurate predictions.</p> 	<p><b>10. Ostrich effect.</b> The decision to ignore dangers or negative information by "burying one's head in the sand," like an ostrich. Research suggests that investors check the value of their holdings significantly less often during bad markets.</p> 	<p><b>11. Outcome bias.</b> Judging a decision based on the outcome – rather than how exactly the decision was made in the moment. Just because you were right, this bias doesn't mean gambling your money was a smart decision.</p> 	<p><b>12. Overconfidence.</b> Some of us are too confident about our abilities, and this causes us to take greater risks in our daily lives. Experts are more prone to this bias than laypeople, since they are more convinced that they are right.</p> 
<p><b>13. Placebo effect.</b> When simply believing that something will have a certain effect on you causes it to have that effect. In medicine, people given fake pills often experience the same physiological effects as people given the real thing.</p> 	<p><b>14. Pro-innovation bias.</b> When a proponent of an innovation tends to overvalue its usefulness and underestimate its limitations. Sound familiar, Silicon Valley?</p> 	<p><b>15. Recency.</b> The tendency to weigh the latest information more heavily than older data. Investors often think the market will always look the way it looks today and make unwise decisions.</p> 	<p><b>16. Salience.</b> Our tendency to focus on the most easily recognizable features of a person or concept. When you think about doing, you might worry about being sued by a lion, as opposed to what is statistically more likely, like, dying in a car accident.</p> 
<p><b>17. Selective perception.</b> Allowing our expectations to influence how we perceive the world. An experiment involving a football game between students from two universities showed that one team saw the opposing team commit more fouls.</p> 	<p><b>18. Stereotyping.</b> Expecting a group or person to have certain qualities without having real information about the person. It allows us to quickly identify strangers as friends or enemies, but people tend to overrate and abuse it.</p> 	<p><b>19. Survivorship bias.</b> An error that comes from focusing only on surviving examples, causing us to minimize a situation. If you believe we might die that being an entrepreneur is easy because we hear about a lot of all those who failed.</p> 	<p><b>20. Zero-risk bias.</b> Scientists have found that we love certainty – even if it's counterproductive. Eliminating risk entirely means there is no chance of harm being caused, but we often choose the option with a higher risk of harm because we fear the possibility of a loss.</p> 

SOURCES: Brian Everset; Ethics Unwrapped; Experiential; Harvard Magazine; HowStuffWorks; LearnVest; Outcome bias in decision making; Journal of Personality and Social Psychology; Psychology Today; The Bias Blind Spot: Perceptions of Bias in Self Versus Others; Personality and Social Psychology Bulletin; The Cognitive Effects of Mass Communication; Theory and Research in Mass Communication; The Bias Blind Spot: Perceptions of Bias in Self Versus Others; The Bias Blind Spot: Perceptions of Bias in Self Versus Others; Wikipedia; You Are Not So Smart; Zhongmin.



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What else?

## Other important issues

- Attention as the most valuable treasure and a scarce commodity (while we take it for granted)
- Clicking as a public act
- Digital footprints
- Virtual persona
- Consequences of communicating
- ...



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## Revisiting MIL

### Media and information literacy:

a composite set of knowledge, skills, attitudes, competencies and practices that allow effectively **access, analyze, critically evaluate, interpret, use, create and disseminate** information and media products with the use of existing means and tools on a creative, legal and ethical basis

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**So, what does it mean:  
to be MI-literate?**



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