

DIGITAL THINKING IN LIBRARIES

DIGITAL THINKING

Is a concept relevant to our digital future.

It begins with deep reflection upon the human goals and social contexts within which we are operating.¹

It takes a human-centred approach (despite all the shiny tech).

CLASS OF 2018

ONLINE RESEARCH

- paste questions into Google
- Google first 94%, Wikipedia 75%
- assume Google finds everything
- time spent finding (X evaluating)
- collect info without reading⁵

GIST VS. DEEP THINKING

Gist thinking: tendency to skim information to be readily distracted from one Google search to the next, until they have pieced together a kaleidoscope of bits and pieces into an overall sense of something.³

Questions for Librarians & Info Professionals...

- ? Are we spending enough time thinking about how our clients think?
- ? Are we planing our big projects in alignment with the new tech coming, or with human need?
- ? Are we embracing or fighting against CLASS of 2018 info skills?
- ? We are all over digital tech, but are we practicing digital thinking?
- ? Are we supporting our clients in their digital thinking?
- ? Do our services include digital thinking?
Examples?

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siloes → connections
closed → open
controlled → empowered
hierarchies → networks
plans → experiments

more than just tech!

THINKING ABOUT THINKING

Two aspects of metacognition:

- reflection &
- self-regulation²

The networked, digital world our children are developing in is having a significant effect on how they think³

What skills are required to operate in this environment?

- technical skills
- cognitive skills
- sociological skills⁶

Current tech & thinking²

STRENGTHS

Helps minimise errors.
Helps decision making & systems thinking.

WEAKNESSES

Info overload.
Habits of seeking familiar sites.
False sense of knowledge.

#TMI

Too Much Information feels real today.

Such concerns are not novel; rather, they characterised humans through the transitions from oral history, to printing press, to the Internet.²

EVALUATING ONLINE INFO

4 variables predict users' skills in evaluating the credibility of online info:

- cognitive development
- cognitive disposition
- academic performance
- prior training⁴

ELEMENTS

To enable a balanced and purposeful approach.

digital habits

digital ethics

digital literacies

digital identities

Cognitive dispositions interact with the way info seeking occurs:⁴

- need for cognition
- flexible thinking
- faith in intuition

Prior training alone did not always help students reach the right conclusions about digital information.²

WHAT DO YOU THINK?

(1) Center for Innovation in Teaching and Learning 2018, Digitally Thinking, University of Illinois, <http://cit.illinois.edu/paradigms/thinking-digitally>.

(2) Athreya, B & Mouza, C 2017, Thinking skills for the digital generation, Springer Publishing, Switzerland.

(3) Buoncristiani, P & Buoncristiani, M 2017, Thinking in a digital world, Rowman & Littlefield Publishers, Maryland.

(4) Metzger et. al. 2015, Believing the Unbelievable: Understanding Young People's Information Literacy Beliefs and Practices in the United States, Journal of Children and Media, 9:3, 325-348.

(5) Purcell et. al. 2012, How teens do research in the digital world, Pew Research Centre, <http://www.pewinternet.org/2012/11/01/how-teens-do-research-in-the-digital-world/>.

(6) Eshet, Y 2012, Thinking in the Digital Era: A revised model for digital literacy, Issues in Informing Science and Technology, vol. 9, 267-276, <http://isit.org/Vol9/ISITv9p267-276Eshet021.pdf>.