From Digital Natives to Digital Literacy

Anchoring Digital Practices through Learning Design

Erika Smith, PhD
Assistant Professor @erikasmith
Mount Royal University

Renate Kahlke, PhD
Research Associate
Royal College of Physicians & Surgeons of Canada

Terry Judd, PhD
Senior Lecturer in Medical Education
The University of Melbourne

This work is made available under a Creative Commons Attribution 4.0 International license. The paper that informed this presentation is published in proceedings and available at:

Introduction & Overview

Defining digital natives and digital literacy

A comparative analysis of search trends

Anchoring digital literacy through Learning Design
Digital natives (Prensky, 2001; Tapscott, 1998): eight recurring claims, inherently tech-savvy, age-based, generational (Net gen, Millennials)

Digital literacy (Gilster, 1997): learned KSAs, “mastering ideas, not just keystrokes”
By around 2010-11, the research evidence pointed to problems with digital native stereotypes.
Search Trends

What does a comparative analysis with Google Trends reveal?
Figure 1: Graph of Google Trends search data over the past 10 years (worldwide).

This graph shows interest related to the search terms “digital natives” (blue) and “digital literacy” (red) since October 2008. According to Google, these “numbers represent search interest relative to the highest point on the chart for the given region and time,” with 100 for peak popularity and 50 indicating a search term is half as popular.
Anchoring Digital Practices through Learning Design
Domains of Digital Literacy

Illustration of digital literacy domains described in Smith, Kahlke, & Judd, 2018

(See also Baker, 2010; Lankshear & Knobel, 2003; Ng, 2012)
What are the key characteristics of Learning Design?
Figure 2: Learning Design elements supporting development of three domains of digital literacy.

We propose five key LD elements to support digital literacies in the procedural and technical, sociocultural, and cognitive domains.
Five Learning Design Elements for DL

1) Aligning technological affordances and learning outcomes.

2) Addressing learner competencies and characteristics.

3) Enabling learner reflection on and articulation of their knowledge and skills.

4) Facilitating collaborative knowledge construction and exchanges in (online) learning communities.

5) Creating opportunities for contextual practice and scaffolding.
Discussion:

Other considerations?
The paper informing this presentation is published in ASCILITE proceedings, available at:

http://2018conference.ascilite.org/conference-proceedings/

This Venn diagram on slide 9 illustrates three interconnected domains of digital literacy (procedural and technical, cognitive, and sociocultural). Please cite this diagram as:

https://doi.org/10.6084/m9.figshare.11908425

This work is made available under a Creative Commons Attribution 4.0 International license.

This research was supported by the Social Sciences and Humanities Research Council of Canada.
References


Thanks!

Any questions or comments?

Corresponding author:

Erika Smith, PhD
Academic Development Centre
Mount Royal University

eesmith@mtroyal.ca
@erikasmith
CREDITS

Special thanks to all the people who made and released these awesome resources for free:

➡️ Presentation template by SlidesCarnival
➡️ Photographs from Death to the Stock Photo (license)