

Informal, Nontraditional, Adventure, and Extreme Learning: Documenting Impactful Online Learning Experiences and Life Change

Curtis J. Bonk, Professor, IU, cjbonk@indiana.edu
Indiana University



1

Learn Anytime, Always On/Mobile



Robert Johnson, who championed the open-format Learn Anytime program at a two-year college in Louisville, Ky. checks students' e-mail while waiting for a flight. "Everything I need to do today, I can do on my phone."

2



Life in 2021...
"Anyone can now learn anything from anyone at any time."



3

Informal Learning Wikipedia

https://en.wikipedia.org/wiki/Informal_learning

- **Informal learning** is characterized "by a low degree of planning and organizing in terms of the learning context, learning support, learning time, and learning objectives." It differs from formal learning, non-formal learning, and self-regulated learning, because it has no set objective in terms of learning outcomes, but an intent to act from the learner's standpoint (e.g., to solve a problem). Typical mechanisms of informal learning include trial and error or learning-by-doing, modeling, feedback, and reflection.

4

June 20, 2019

What is Informal Learning?

Emma O'Neill, LearnUpon Blog

<https://www.learnupon.com/blog/informal-learning/>

Informal learning is the name given to learning that's unstructured and takes place away from traditional, formal learning settings, like a classroom. It has no clear goals or set objectives as it's often unplanned and self-directed by the learner.



5

June 20, 2019

What is Informal Learning?

Emma O'Neill, LearnUpon Blog

<https://www.learnupon.com/blog/informal-learning/>

Informal learning is a type of learning that happens every day, whether we realize it or not. Organic, unstructured, and learner-driven, informal learning theory is thought to be how we, as humans, learn around 90% of the time.



6

April 26, 2021**10 Informal Learning Examples**
Gabriella Rivera, Microlearning Blog<https://www.edapp.com/blog/10-informal-learning-examples/>

Informal learning is learning out of the curriculum and has no set structure. It gives control and flexibility to learners as information is consumed at their own pace and can happen anytime.



7

April 26, 2021**10 Informal Learning Examples**
Gabriella Rivera, Microlearning Blog<https://www.edapp.com/blog/10-informal-learning-examples/>

In the workplace, informal learning supports and reinforces the formal learning received by employees. While businesses spend a lot in conducting training sessions, the 70-20-10 model in learning and development suggests that individuals get 70% of their knowledge from work experiences, 20% from peer interactions, and only 10% from formal learning.



8

February 28, 2019**Panopto****Infographic: All Kinds of Informal Learning**<https://uploads.panopto.com/2019/02/28113845/informal-learning-infographic.png>

Usually, when we think about learning, the image that comes to mind is that of a classroom where the teaching is structured and instructor-driven. It's easy to forget that much of the learning we do is done *informally*—through conversations with knowledgeable people in our networks, through observation of co-workers, and through good old trial and error. In contrast with formal learning, informal learning is driven by the learner's goals, and is often more spontaneous and social.



9

February 28, 2019**Panopto****Infographic: All Kinds of Informal Learning**
Jay Cross, Informal Learning, 2007<https://uploads.panopto.com/2019/02/28113845/informal-learning-infographic.png>

Informal learning... "As defined by the graphic, informal learning is the "unofficial, unscheduled, impromptu way people learn to do their jobs."



10

Informal Meetings and Class Guest Experts**Jay Cross, Berkeley** (<https://connect.uu.edu/p4bytsoroth/>)

11

June 9, 2015**Teaching Tip: How to Integrate Informal Learning into the Classroom, Cross 2007****AUF News and Information (U of Alaska Fairbanks)**<https://news.uaf.edu/teaching-tip-how-to-integrate-informal-learning-into-the-classroom/>

(c) Marcia L. Conner, 2004

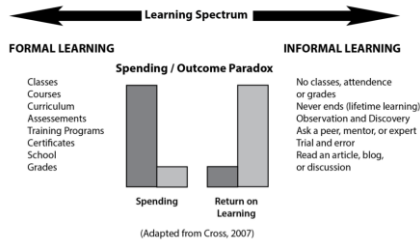
12

12

Chapter 17: Informal Learning

Tim Boileau, Pressbooks

<https://ltdfoundations.pressbooks.com/chapter/informal-learning-by-boileau/>



13

Extreme Learning Defined (Bonk, 2011)

"Extreme learning can involve **learning while on a boat at sea near the North Pole or when sailing around the world**. It also occurs when tracking the blog and podcasts postings of those in similar adventures such as riding a bike or a car around the world or through the Americas. **Extreme learning also includes more sedate and passive forms of learning including watching an online video in TED, LinkTV, CurrentTV, or YouTube.**"



14

February 1, 2021

Yale is offering its highly popular 'happiness' course to high school students for free

By Marika Gerken, CNN

<https://www.cnn.com/2021/02/01/us/yale-course-the-class-and-wellness/index.html>
(3.4 million enrolled, 28,500 reviews)

Yale is offering its highly popular 'happiness' course to high school students for free



15

December 4, 2020

Mysterious monoliths are appearing across the world.

Here's what we know.

Constance Grady, Vox

<https://www.vox.com/culture/22062796/monoliths-utah-california-romania>

From left: The California monolith, the Utah monolith, and the Romanian monolith. *Luke Phillips/Twitter; Utah Department of Public Safety; Andrei Carabelea/Facebook*

Mysterious monoliths are appearing across the world. Here's what we know.

We don't know where the mysterious monoliths come from, but we do know they're real.

Source: Vox.com | @monoliths | Jan 2021 | 10/10/2021



16

MOOC Office Hours in Other Countries

Chuck Severance, (U Michigan/Coursera) in Barcelona

<http://www.youtube.com/watch?v=JzNHvmSv8TI>



17

March 22, 2021

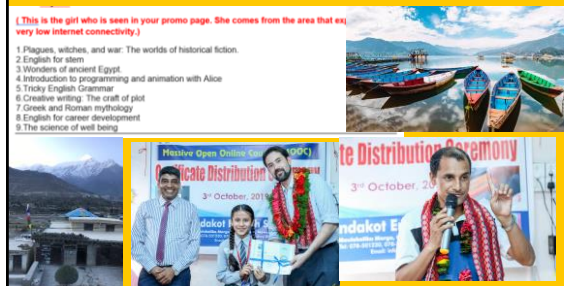
Famous Stanford coding course seeks to repeat success of novel model of online learning (10,000 students, 120 countries, 900 volunteer teachers)

<https://news.stanford.edu/2021/03/22/famous-stanford-coding-course-free-online/>



18

Participant from Nepal (teenage girl)



19

Participant from Nepal Motherland Secondary School, Pokhara (13 year old girl; first MOOC at age 9)



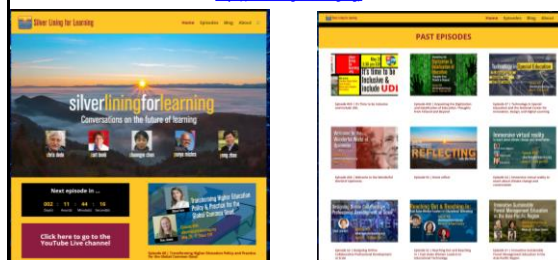
20

October 31, 2020 Silver Lining for Learning Episode #33: Nepal Video (59:05): <https://youtu.be/4k6pMe4XnP8>



21

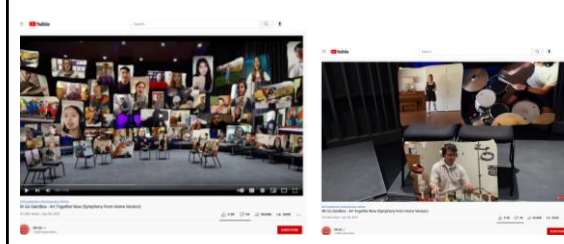
May 29, 2021 New Models of Education Emerging Silver Lining for Learning <https://silverliningforlearning.org/>



22

April 28, 2021

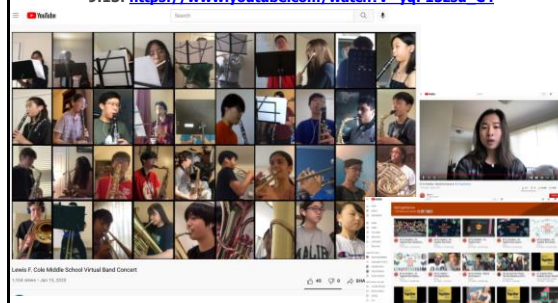
OK Go Sandbox - Art Together Now (Symphony From Home Version)
Video (4:54): <https://www.youtube.com/watch?v=i7va3BbNoSk>
K-12 Project: <https://okgosandbox.org/the-writings-on-the-wall/illusions>



23

June 15, 2020

Lewis F. Cole Middle School Virtual Band Concert
9:13: https://www.youtube.com/watch?v=yqP15zsu_C4



24

January 7, 2021 (dies at 103)

Teach from Vietnam to the World BBC News Asia

Even though he is now very elderly Vinh Bao (age 96) still teaches music, using his computer to coach pupils across the globe.

<http://www.bbc.com/news/world-asia-23497559>
https://www.youtube.com/watch?v=U8yL_zPTwEI
<https://sportsbeazer.com/allsports/regions/vinh-bao-a-hand-of-96-year-old-love-of-music-culture-sport/>

14 August 2013 Last updated at 08:15 ET

Working Lives Vietnam

WATCH: Milk magnate | Textile worker | Software engineer



Working Lives Vietnam: Musician

14 August 2013 Last updated at 08:15 ET

Working Lives Vietnam

WATCH: Milk magnate | Textile worker | Software engineer



Working Lives Vietnam: Musician

There is no system for writing Vietnamese traditional music so its survival depends on master musicians passing their skills on to the next generation.

25

Shared Online History Videos

(e.g., "History for Music Lovers" with over 50 songs including: Trojan War "Tainted Love" by Soft Cell; Charlemagne "Call Me" by Blondie, Cleopatra, Napoleon, Shakespeare, the Vikings)



Amy Burvall & Herb Mahelona - What I Learned from Napoleon and MTV - TEDxHonolulu 2011



26

July 31, 2020

Learning is More Personal

Khan Academy aims to give 'strategic supplement'
Brett Molina, USA Today

<https://www.usatoday.com/story/tech/2020/07/30/khan-academy-aims-to-give-strategic-supplement/5325480002/>

Q&A: Khan Academy CEO Sal Khan on the new school year and virtual learning



27

April 11, 2020 Learning is More Video-based...

(e.g., Flipgrid)

Ed Tech with Adam: <https://www.youtube.com/watch?v=hyp0PwqF8>

<https://edtechwithadam.com/2019/10/18/microsoft-acquires-social-learning-platform-flipgrid/>



28

March 2015

A Visual History of Human Knowledge
Manuel Lima, TED Talk

https://www.ted.com/talks/manuel_lima_a_visual_history_of_human_knowledge#t-484317



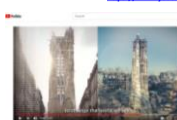
29

April 22, 2018

Learning is More Visual

Microsoft AI Commercial ft. Common

Video 1:00: Microsoft AI Commercial ft: <https://www.youtube.com/watch?v=9ac72hhdJ> (Feb 11, 2018)
 Video 1:40: Microsoft AI: Amplifying Human Ingenuity: <https://www.youtube.com/watch?v=30m27288Pw>
 Video 1:00: Microsoft AI: Empowering Inventors ft. Common: <https://www.youtube.com/watch?v=250Wd4YtW> (April 22, 2018)
 Video 1:00: Microsoft AI: Ecom Preserving History ft. Common: <https://www.youtube.com/watch?v=291234thd5H4> (April 22, 2018)
 Video 0:44: Microsoft AI + The Yield: Taking the guesswork out of farming ft. Common: <https://www.youtube.com/watch?v=7zuxb0H4s> (April 22, 2018)

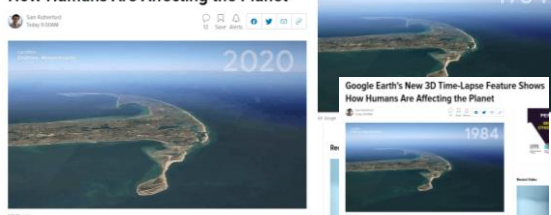


30

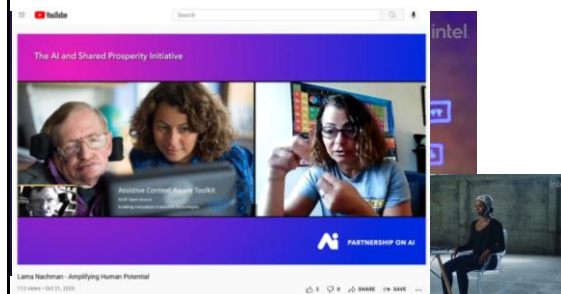
31

One of the best examples of this is Bryan Alexander's [Future Trends Forum](#) . Bryan is an excellent facilitator. He skillfully brings a wide range of questions from his informed audience to his expert guests. The platform he uses, [Shindig](#), lends itself well to the format he has chosen in that it incorporates a chat stream where side conversations can occur; a Q&A functionality, and the ability to beam questioners up to a co-equal status with the host and guest(s).

32



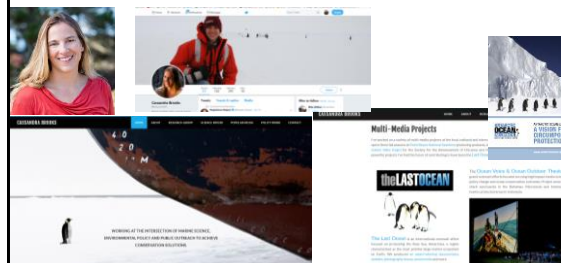
33



34




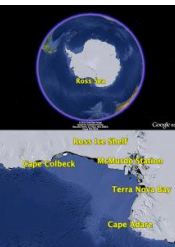
35



36

Blog Adventures

Tracing the fate of Algal Carbon Export in the Ross Sea, Antarctica
 TRACERS: The NBP13-02 Cruise, February 12 to April 5, 2013
<http://tracers-nbp1302.blogspot.com/p/the-project.html>
 From: Cassandra Brooks [cbrooks1@stanford.edu]
 Sent: Thursday, January 31, 2013 12:09 AM
 Subject: I'm heading out today to New Zealand, then flying to Antarctica where we pick up our NSF icebreaker. We'll be at sea for about 54 days.

37

October 31, 2014

Penguin Science (Penguin Cam), Jean Pennycook

<http://www.penguinscience.com/>
<http://www.thistle.org/pcam2/images.shtml>




38

April 29, 2012: Learning is More Open

Open Education's Wide World of Possibilities, Chronicle of Higher Education, Katherine Mangan


http://chronicle.com/article/Open-Education-Wide-World-of-Possibilities/131672?cid=ref&utm_source=af&utm_medium=ns



39

Live Science

(Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)

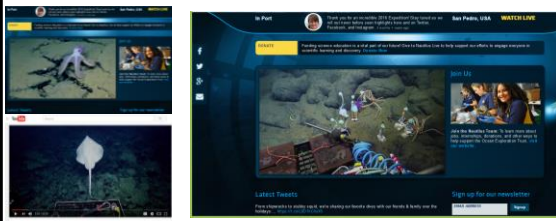


40

September 16, 2016

Live Science



Best of the E/V Nautilus 2016 Expedition | Nautilus Live
 (video: 32:28)
<http://www.nautiluslive.org/>
<https://www.youtube.com/watch?v=R-412PKHndI>



41

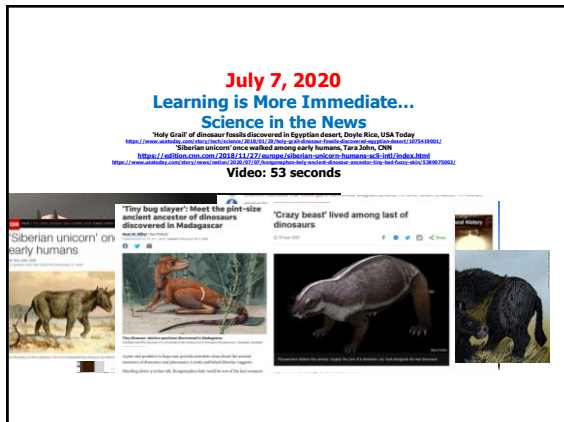
Remote Animal Streaming

Remote Maine puffin colony up close on HD web cam
 Clarke Canfield, The Stateman, June 27, 2012
<http://www.stateman.com/business/technology/remote-maine-puffin-colony-up-close-on-hd-2495257.html>

This still frame from streaming online video, provided by explore.org, the Annenberg Foundation and the National Audubon Society, shows puffins on the shore of Seal Island, Maine, Wednesday, June 27, 2012. The island is the habitat for the largest puffin colony in the U.S.

42



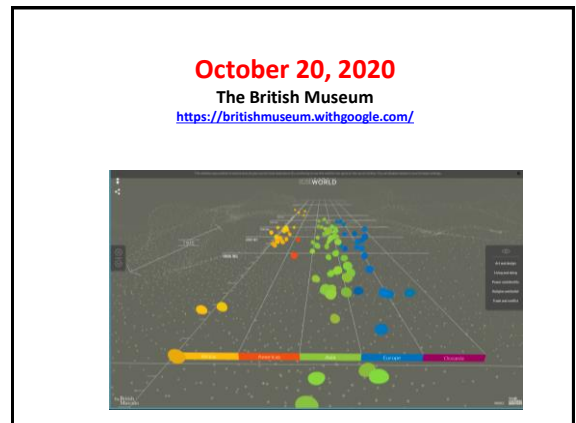
43



44



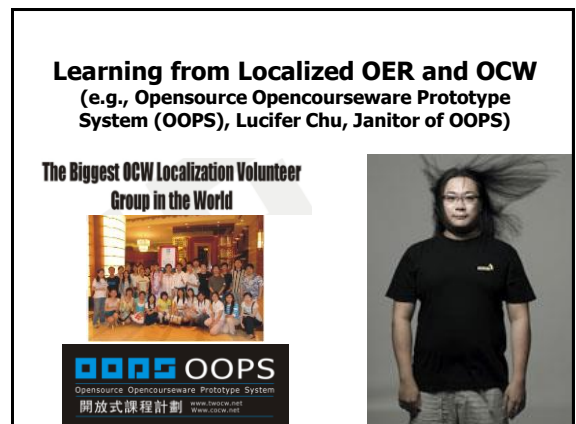
45



46



47



48

Adventures of a Teenage Polyglot New York Times, **March 9, 2012**, John Leland

http://www.nytimes.com/2012/03/11/youngworld/teenage-master-of-languages-finds-online-fellowship.html?_r=1&page=entertainment



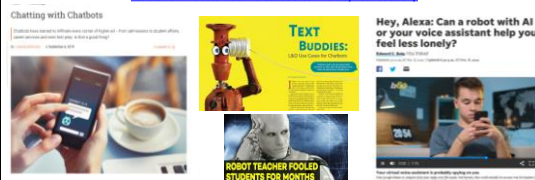
Timothy posts videos of himself speaking several languages on YouTube.

49

May/June 2020 Learning is More On Demand Chatting with Chatbots and Text Buddies

Lindsey McKenzie, Inside Higher Ed

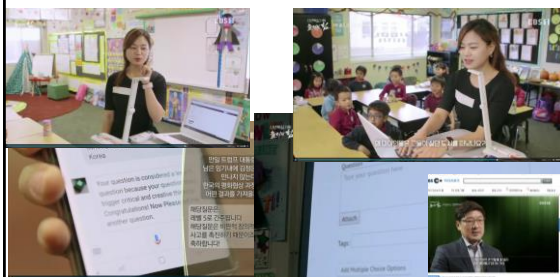
<https://www.insidehighered.com/feature/2020/05/08/learning-more-on-demand>
<https://www.usatoday.com/story/tech/2019/11/08/alexa-google-assistant-ai-robots-become-substitute-friends/4057885002/>



50

January 14, 2019 SMILE Project

<http://courtbank.com/powers-of-play.html>
<http://courtbank.com/paul-kim.html>



51

Google Earth Archeology Research (e.g., 450 sites of interest in Afghanistan found by David Thomas, La Trobe Univ., Melbourne, Australia)



52

Lacking Teachers and Textbooks, India's Schools Turn to Khan Academy to Survive, New York Times, **October 15, 2012**, Anupama Chandrasekaran

<http://india.blogs.nytimes.com/2012/10/15/lacking-teachers-and-textbooks-indias-schools-turn-to-khan-academy-to-survive/>

The New York Times International Herald Tribune



Students at Sree Karpagavalli Vidhyalaya school in Chennai, Tamil Nadu, watching Khan Academy math videos.

53

April 20, 2015 250 MOOCs and Counting: One Man's Educational Journey, Chronicle of Higher Education

<http://chronicle.com/article/250-MOOCsCounting-One/229397/?cid=at>
If the MOOC movement has faded, nobody told Jima Ngei. Mr. Ngei, who lives in Port Harcourt, Nigeria, has completed and passed 250.



Jima Ngei: "I had this unrelenting fear that this miracle of free access might evaporate soon."

54

Kids Learn Online, Teach Online (e.g., the World's Youngest Teacher; Adora Svitak)



55

August 5, 2015 Shubham Jaglan Overwhelmed by "Dream" Return Home After Double World Championship Disha Chopra, NDTV Sports

<http://sports.ndtv.com/golf/news/246551-shubham-jaglan-overwhelmed-by-dream-return-home-after-double-world-championship>
<http://www.ndtv.com/video/player/news/india-s-golf-prodigy-shubham-jaglan-returns-home-to-hero-s-welcome/3278318>



56

October 30, 2017 MOOCs ramp up new fields Report: 59% of employed data scientists learned skills on their own or via a MOOC Alison DeNisco Rayome

<https://www.techrepublic.com/article/report-59-of-employed-data-scientists-learned-skills-on-their-own-or-via-a-mooc/>



57

Learning is More Global CNA - Speaking Exchange (video chats) FCB Brazil and the CNA language school network are launching the Speaking Exchange project, which connects CNA students in Brazil with Americans living in retirement homes.

<https://www.youtube.com/watch?v=5-SEHvFOk>



58

February 22, 2017 Learning is More Informal Digital citizenship lessons from a 9-year-old with 18,000 Twitter followers, Alan November, eSchool News

<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/?all>
<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/?all>
<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/?all>
<https://www.youtube.com/watch?v=330jgJc7u8c>



59

June 13, 2016 Learning is More Free and Open Nine-Year-Old Anvitha Vijay is the Youngest Developer at WWDC (age 9) (Apple Worldwide Developers Conference), Gadgets

<http://gizmodo.com/apple-nine-year-old-anvitha-vijay-is-the-youngest-developer-at-wwdc-1213184841378>



60

May 19, 2016
Learning is More Free and Open
From MOOC to bootcamp to MIT
MIT News, Office of Digital Learning
 (Jin Wu—from MITx to MIT Global Entrepreneurship Bootcamp to master's student)

<http://news.mit.edu/2016/mooc-bootcamp-mit-0519>



61

November 26, 2019
Chapter 16: Courses for a Cause:
MOOC Contributions to a "Better Place for All"
 (Marianne Krasny et al., 2020)



62

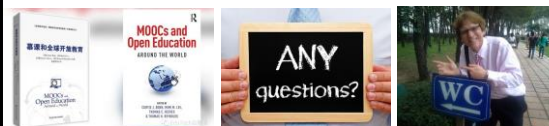
November 26, 2019
Chapter 25. Responsive Innovations in MOOCs for
Development: A Case Study of AgMOOCs in India 300
Balaji Venkataraman and Tadinada V. Prabhakar
 (agMOOCs in India)
<http://www.agmoocs.in/>



63

Any Questions or Comments?

Slides at: TrainingShare.com
 Papers: PublicationShare.com
 Free book: <http://tec-variety.com/>
 Email: cjbonk@indiana.edu



64