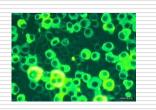
## Content Curation to build and share Content Hubs for

### Knowledge Management and Information Literacies



Gilbert C Faure MD, PhD Prof Emeritus Immunologie







Université Lorraine, Nancy, FRANCE No conflict of interest to declare



et CREM

After Riga, Paris

**Bobcatsss 2023** 

Oslo, Norway







HORIZ

## 3 challenges for medical students and medical teachers in 2022

accessing relevant information and knowledge teaching and learning to access knowledge in other words, becoming and remaining information and health literate

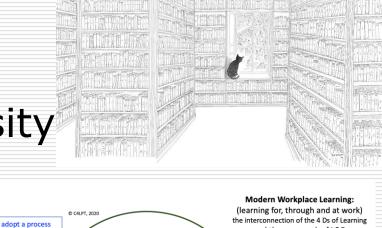
Compared to a doubling time of medical knowledge of 50 years in 1950, 7 years in 1980, and 3.5 years in

## Collective knowledge and Investigative intelligence



Before: Libraries

Now: Internet / Infobesity



DISCOURSE

Social Learning

(interacting with others)

conferences

networking events

live talks

book clubs, etc

create resources

for performance

support

professional

social network:

(follow, interact)

and the new work of L&D

foster learnability

encourage a daily

learning habit

build modern

learning skills

help teams and groups

collaborate, share and learn from

one another as part of daily work

curate & coordinate

an events calendar

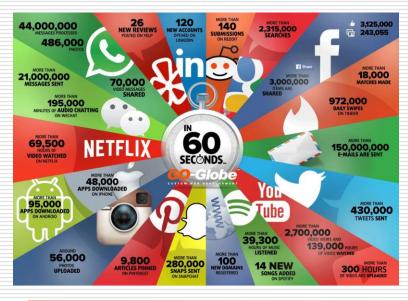
non-digital

resources:

books, magazines, etc

DISCOVERY

curate resources



a boss guidance from job aids **Informal Learning** DOING manager (Finding things out for oneself) Experiential Learning help workers (Learning from work) to manage up digital resources: working with videos podcasts, blogs, articles, etc doing the coach/mentor (search, subscribe, curate) day job help workers to

support informal

mentoring

work teams

Communities

of Practice

of continuous

self-development

self-paced

courses

simulations AR. VR & MR

OTJ learning activities

stretch assignments

classroom

training

guided social

learning

training

create/curate.

deliver and

manage formal

learning

help managers

to be more of

DIDACTICS

**Formal Learning** 

(Being taught)

reflect on daily

work experiences

Thanks Sempé, Jane Hart

## Is Content CURATION useful for Knowledge Management and metaliteracy?

A recent concept?

- Many tools: >50
- Pearltrees, Paper.li, Pinterest, TumblR, Storify, Sharezy, Flipboard... Cronycle
- Scoop.it
  - A French/US Start-up
  - Various plans (Individual, Education, Business)





## Curator is:... gold-digger, DJ, Hunter-gatherer, Scout...

- Selection
  - Agregation, distillation,
- « Editorialisation », elevation
  - Commentaries
- Diffusion
  - Sharing









### Methods

# Research Action: Open Knowledge Content curation (OKCC/C3O) Personal and colleagues' networks

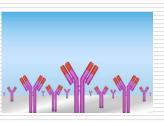
- Personal and colleagues' networks experiences for Research, Teaching and Learning
- Evaluation of topics from curators in Biology related fields
  Other subjects mainly related to
  - education

## Immunology:

Topics covered by teachers (GCF et al.)



- Basic Science, Biotechnologies, BioTherapies
  - Immunology (>7.7K scoops, >96K visitors, >126K views)



From Flow Cytometry to Cytomics (>4.6K scoops, >15,3K visitors, >37,2K views)

Immunology and Biotherapies (>9,3K scoops, >14,8K visitors, >34,4K views)

Mucosal Immunity (>4,9K scoops, >19,7 K views, >6,1 visitors)

#### Immuno-Pathology...

- Auto-immunity, (>3,8K scoops, >15,3K views, >4,5K vis)
- Allergy and clinical immunology (>2,8K sc, >14,1K v, >4,3Kvis)
- Neuroimmunology (>2Ksc, >7,5Kv, >1,7K vis)
- History of Immunology (>1Ksc, >3,7Kv, >1,1Kvis)

## And beyond...:

## Fake news and vaccinations

A content Hub for « vaccine literacy » of Health professionnals and Medical students

### Social listening

>1.5K selected posts



Since 1/2020 ...

https://www.scoop.it/topic/assimactualites

## Topics ... by other curators



## **Biology related**

Virology https://www.scoop.it/topic/virusworld;

Entomology <a href="https://www.scoop.it/topic/entomonews">https://www.scoop.it/topic/entomonews</a>;

#### Other Science Fields

Geography https://www.scoop.it/topic/geography-education;



#### **Education and Learning:**

https://www.scoop.it/topic/tools-for-learners;



https://www.scoop.it/topic/21st-century-learning-and-teaching

Sino-french medical training program Nancy-

Wuhan 2020: 危机

Covid-19: 23/1/2020



https://www.scoop.it/topic/wuhan?page=6&tag=COVID-19

## **Long Distance** teaching and learning: classes 2015/6/7

Selected resources for homework

DIU: **Active learning** by students on chosen topics building portfolio







UE Master 7.309

DIU Méthodologies de la recherche médicale et chirurgicales

Implementation of Scoop.it Content Curation tool for active/hybrid learning in a module on clinical research

50 students (medicine, maieutic) +10 chinese students from Nancy Wuhan training program

Introductory course on Scientific Information Access to Curated Resources by teachers

Open a medical topic of interest using Scoop.it free plan (one topic, up to 50 posts)

Opinion and evaluation survey after 3 months



### Results

## **Knowledge management**

Finding relevant information

Sharing information

Building Content Hubs for communities of practice (CoPs)

Retrieving information

#### Interests for

Teachers, Researchers, Medical Doctors,

Master and PhD students

Medical students



## Finding information

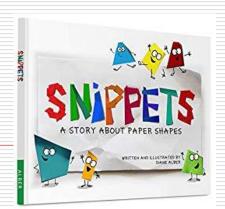
Either focused or serendipity



## **Building and enrichment of content hubs**

with snippets of information

- Classical info Research (Pubmed, Google Scholar..)
- Web « Crawling » of internet with Scoop.it , personalized +++
  - Sources: Published Journals, Websites, Blogs, Press releases, Social networks (Twitter, Linkedin, Facebook..) Research social networks (Researchgate..)
- Curating when browsing (applet)
- Shared scoops (scoop.it network)
- Creating scoops + publishing (Slideshare)



## Sharing and retrieving!

## **OPEN Webmagazine**

Tagged, commented, discussed

Attractive (images)

Shared on other networks (Twitter, Linkedin (25) Facebook, Google+

Via e-mails, newsletters

#### **Content Hub searchable**





## Benefits for teachers and content curator researchers



- (1)keeping abreast of information scientific (and societal) for CPD and e-learning
- (2) Building leadership in specific areas
- (3) Joining specialists **networks and interest** communities

(4)Opening new research fields (serendipity)

### Benefits for research trainees

- (1) Building of research content hubs and **portfolios** (master and **PhD**)
- (2) Becoming **information literate, able** to surf the wave
  - (1) Resources, primary documents, databases, predatory journals, Open Access
  - (2) Foreign languages
- (3) for future **life- long learning** » in universities, research centres, industries...
  - (1) PLN « personal learning network »

## Health and information literacies of medical students

## **Active learning**

Discovery of

width of medical knowledge

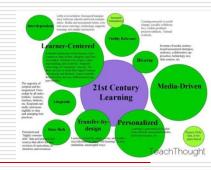
information available for lay-people communication with lay people

Interaction with professional networks
Understanding of fake news in health information

## Self learning



## **Training Opportunities**



New ways of learning: Flipped or **blended or hybrid** 

Information and digital literacy: mastering information tools and techniques

#### Learning by reading and writing

Analysis (tags), summaries, comments

Stimulating curiosity in your research field and

beyond





#### Overview

#### **Context:**

Collective knowledge

#### **Infobesity**

Information and Health Literacy

Curation: Tools... Scoop.it

Medical Immunology

Other curators, other topics

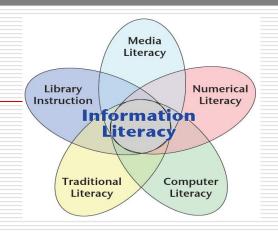
Research action projects

Open Knowledge management

Information literacies

Reading, Writing, Learning, and more

Advantages and challenges





## Disclaimer once upon a time...

**Europe SCICOM meetings** 

Paris MRES Comité stratégique IST

UHP Nancy 1 Chargé de mission DOC

AUF: ASSIM: maître toile

(http://www.assim.refer.org)

IUIS/ICSU with Michelle Letarte

Now: Emeritus, OKCC/C30

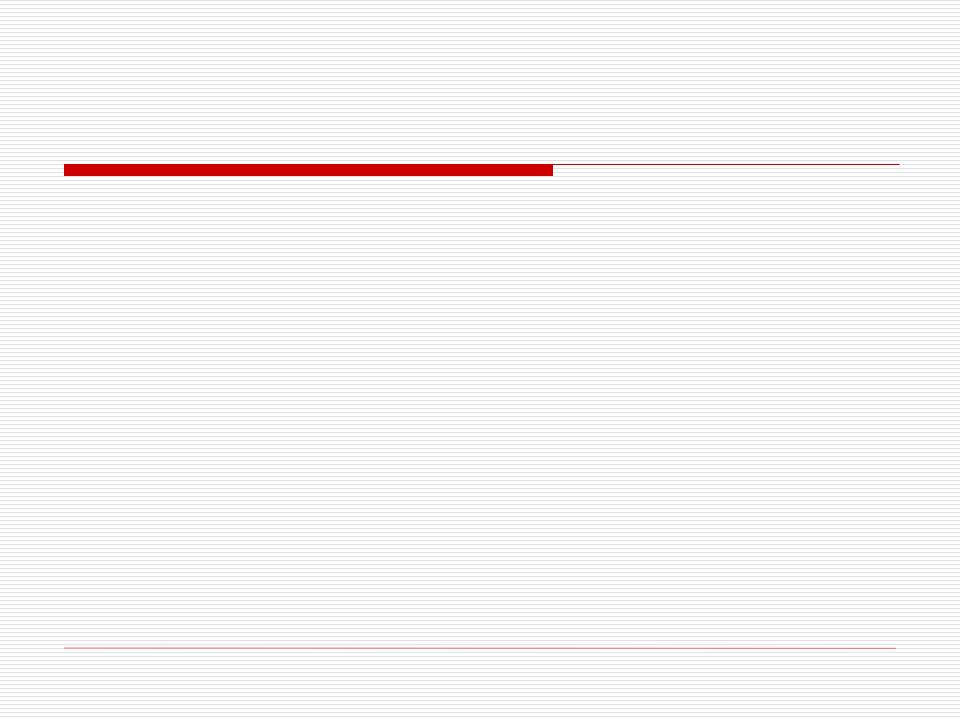
And Sino-French Medical Training programs (Wuhan and Kunming)

http://www.scoop.it/u/gilbertcfaure

https://fr2.slideshare.net/gcfaure

No conflict of interest to declare





### Content curation

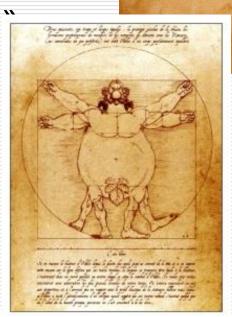
Taking care of contents
Information and Knowledge
Accessing
Teaching and Learning
To be information litterate

### **INFOBESITY**

- « Trop d'information tue l'information... »
- And knowledge
  - Surinformation, Pollution informationnelle,
  - Harcèlement textuel
- Publications ... hyperprolifics
- Social networks
  - « Fake » news…







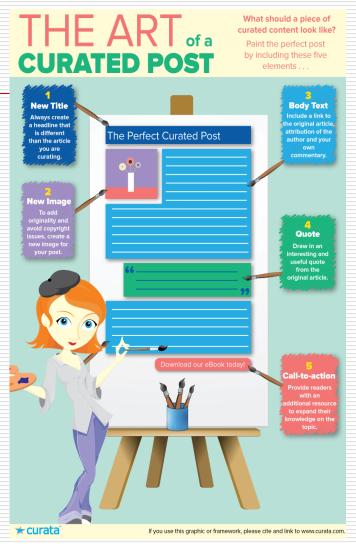
## Curating information is

## reading and writing

### **Title**

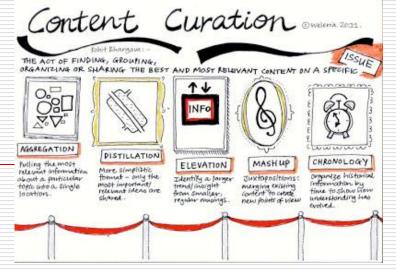
Illustration Summary Comments

Tags: Keywords



## Snippets or nuggets of information

## From Libfocus



**Aggregation** - compiling the most relevant information about a particular topic into a single location (this is the type of curation most people think of)

**Distillation** - simplifying information down to the key or essential ideas

**Elevation** - identifying a larger trend or 'the bigger picture' from individual posts, articles or details

**Mash ups** - merging and remixing existing content to create new ideas or perspectives

**Chronology** - organising information in a timeline to show the evolution of a subject, topic or idea

## Topics covered by colleagues and trainees

#### By researchers and colleagues

- M. de Carvalho Nancy Immune monitoring
- R.Creusot, Columbia NY USA Diabetes
- Complement JD Lambris, Philadelphia, Pa, USA

#### By students

- PhD students XW China ENT,
- Master students from Nancy-Wuhan Training program :
   Methodologies of medical clinical and surgical research
- 15 chinese + 20 french 2020
- 10 chinese +50 french 2021 students

Topics related to medicine and biology



Bonus points on activity (research, posts, comments, tags)

Foreign language usage



### Results



Diversity of topics (Alzheimer, Autoimmunity, Cancer, Cardiology, Gynecology, Grafts, HIV, Neurology... Phagotherapy)

At least 25 posts... up to full load (65%) Medical (80%) Lay people resources Keywords, Comments and summaries Usage of English >60%

## Plus

Knowledge base
Vu par le documentaliste
Vu par l'enseignant
Information literacy 5PMIS
Adding SMIL (Scientific and Media IL)

## Online learning Connected Learning

### Blended learning,

E-learning,

Self-learning

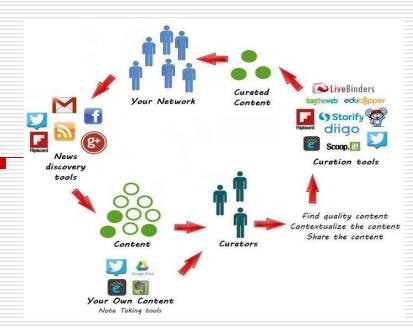
M-learning (micro-, mobile-)

Social learning

Invisible-, adaptative-

## Reading and writing!

Digital Literacy, Curiosity





## Summary



- In my experience, one of the best curation tools on the web for serious information
  - Crawling engine and enrichment capacities
- A virtual scientific news « journal » and database easy to browse with pictures
  - For information literacy and curiosity
  - Search engine inside is a major asset
- The human factor of curation is the added value compared to robots (SEO): selection, editorialism
- And the limit, requiring everyday work

## Information Literacy (IL) in high education:

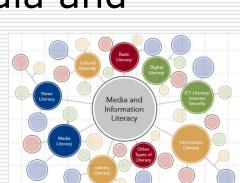
- Society 2020
  - Multi-skilled learners
  - Able to think critically
  - Pose and solve problems
  - Become independent and life long learners
- OCDE and UNESCO: (MIL) Media and Information Literacy

Recognize needs of information!!

Localize information!

Select information

Organize information



HORIZ N 2020

## **Health Literacy**

## Challenges





Human factor of curation is added value compared to algorithms: selection, editorialisation **But** 

## Human dependency is the limit

Day to day duty of teachers, researchers like « walking the dog »





Permanence of tools

