

DIGITAL TECHNOLOGIES & STRATEGIES FOR KNOWLEDGE UTILIZATION

KNOWLEDGE UTILISATION 2012

#KU12 @susie_mac

SUSIE MACFARLANE

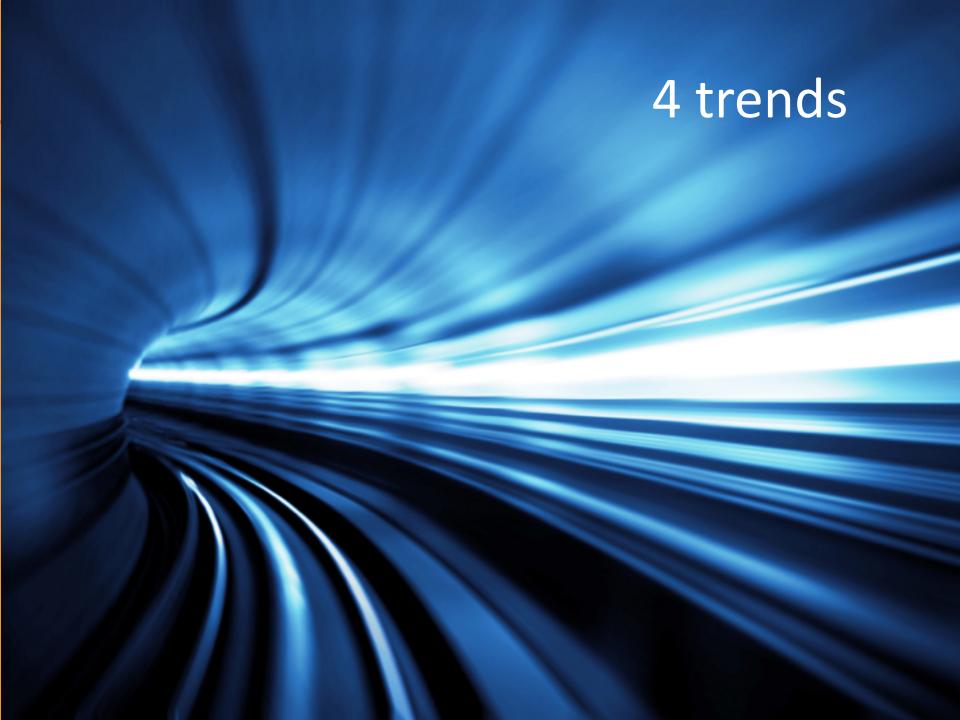
E-LEARNING EDUCATIONAL DEVELOPER SCHOOL OF EXERCISE & NUTRITION SCIENCES FACULTY OF HEALTH, DEAKIN UNIVERSITY



CONTENTS

- 4 trends
- Digital identity
- Community
- Curation
- Crowdsourcing
- Mobile
- Gamification
- A guiding framework







Trend #1

Pace of change Information overload

We are being forced to re-examine what constitutes knowledge and are moving from expert developed and sanctioned knowledge to collaborative forms of knowledge construction.

Graham Attwell Warwick University





"The present speed of information based on new technologies has undermined traditional expert driven processes of knowledge development and dissemination".

Dave Cormier (2008)

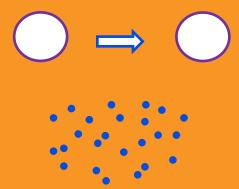
	Traditional	21st Century				
Skill	Learning a body of knowledge Lifelong learning					
Need	Knowing how	Knowing how to learn				
Purpose	Creating knowledge	Creating meaning				
Values	Individual success and competition	Community thriving and collaboration				
Site / Speed	Papers & books	Blogs, posts & tweets				
Context	Certainty	Constant change				



Trend #2: Connectedness

Problems of simplicity

Problems of disorganised complexity



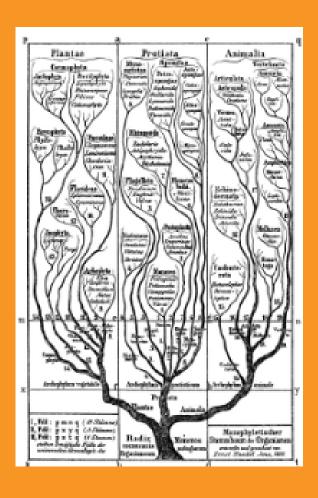
Problems of organised complexity



Warren Weaver, 1948

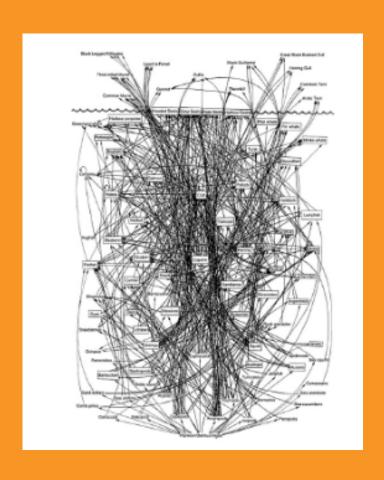


Knowledge structures





Knowledge structures



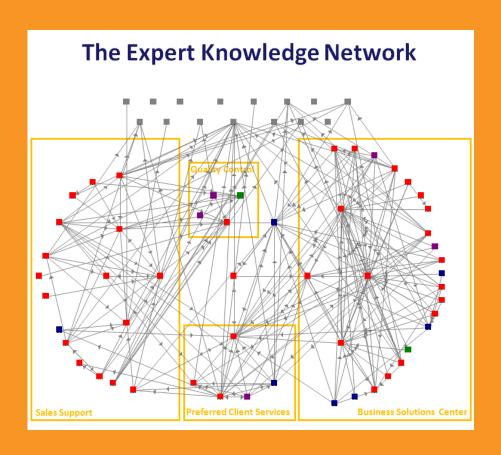


Organisational structures

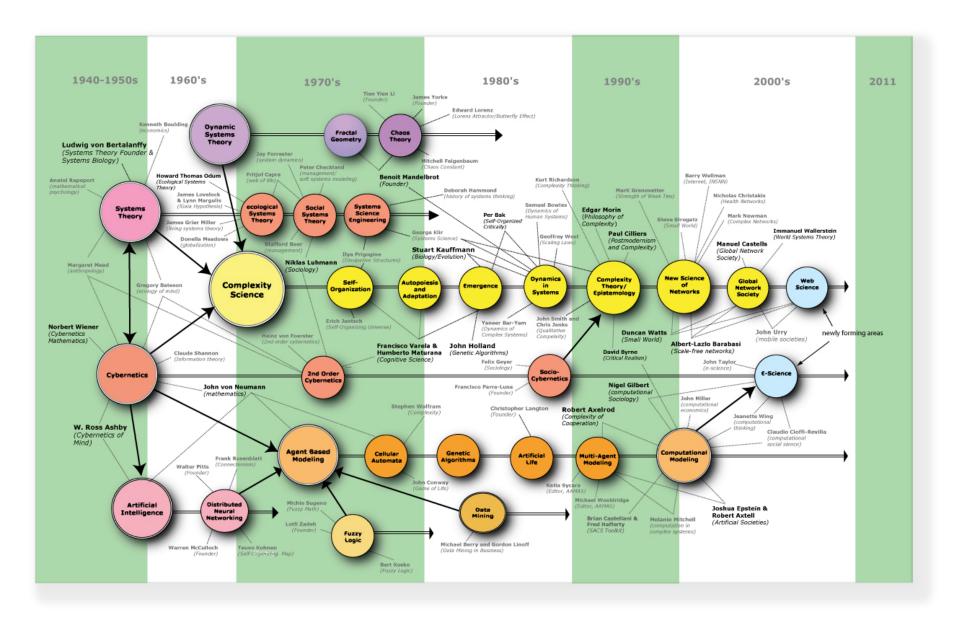


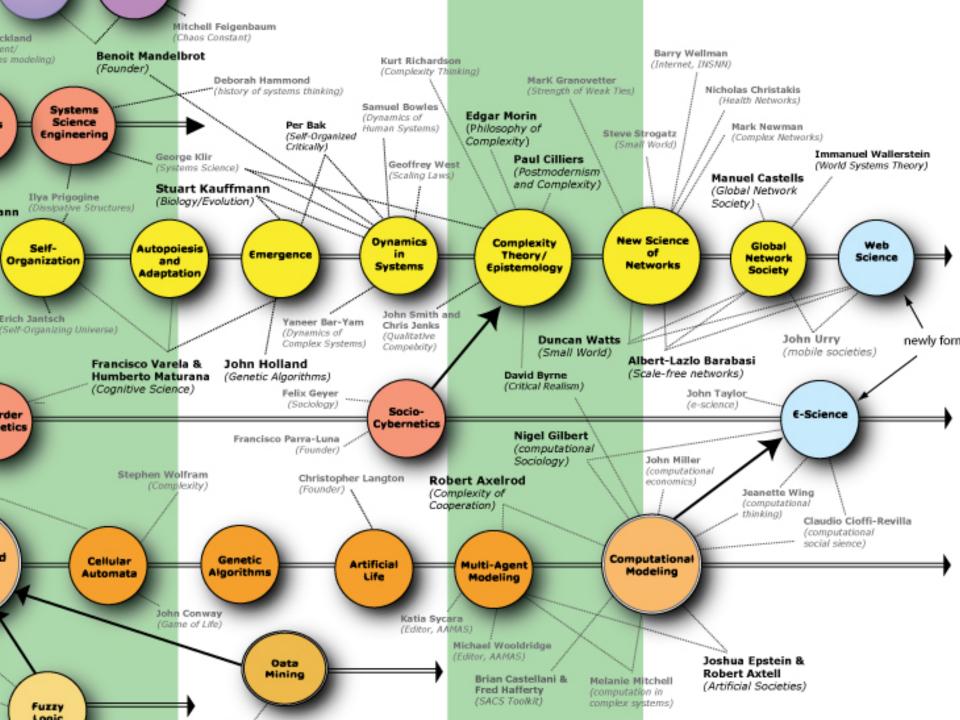


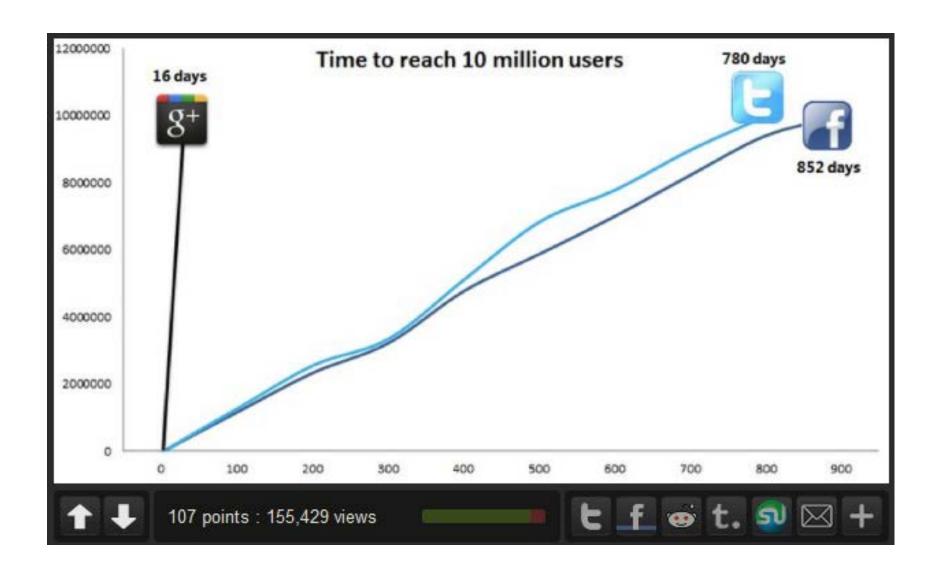
Knowledge structures



Research in complexity science









500m users



160m users



90m users



340m tweets1m new accounts1.6b searches

Per day!

300m photos/d 500m mobile

900m users

2b views/m

Fastest growing segment

45 - 54 yr olds

55% of those aged 45 – 54 yrs in the US have a profile on a social media site







THE CONVERSATION

Latest Meas and research

Home Business + Economy Environment + Energy Health + Medicine Politics + Society Science + Technology USA 2012

Hot Topics Nobel prize 2012 Great Barrier Reef Future of Higher Education Open Access Over-diagnosis epidemic Shadow Reserve Bank Shades of grey Saving the ozone Medical myths Explainer

15 October 2012, 5.13pm AEST

OpenLearning launches into competitive MOOCs market

AUTHOR



Charls Palmer Editor, The Conversation

INTERVIEWED



Adam Brimo Co-founder, OpenLearning.com



Phillip Dawson

Lecturer in Learning and Teaching at Monash University



David Glanc

Director, Centre for Software Practice at University of Western Australia

The Conversation provides independent analysis and commentary from academics and researchers.

We are funded by CSIRO, Melbourne, Monash, RMIT, UTS, UWA, Canberra, CDU, Deakin, Filnders, Griffith, La Trobe, Murdoch, QUT, Swinburne, UniSA, UTAS, UWS and VU.



With online learning, teachers no longer have to be everywhere all the time says online learning start-up OpenLearning. Ingo Bernhardt

A start-up that enables universities to offer massive open online courses (MOOCs) has opened for business, signing on more than 1,000 students to a 12-week computer science and engineering course from the University of New South Wales.

₆ 0	1 Comment					
Pi	Republish					
	Emall					
_						



Trend #3

Cross-disciplinarity

Trend #4

Web 1.0 - 2.0 - 3.0Learning $1.0 \rightarrow 2.0 \rightarrow 3.0$

	Learning 1.0	Learning 2.0	Learning 3.0
Process	Memorize accepted truth	Construct knowledge	
Task	Find information	Filter and evaluate information	
Domain	Research	Recommendation/ Peer review	



Process

Task

Domain

KU



Learning 2.0

Construct knowledge

Filter and evaluate

information

Recommendation/

Peer review

Engage and

collaborate (?)

Learning 3.0

Negotiate meaning and

shared wisdom

Collaborate and share

through network

intelligence

Communities & learning

networks

Form communities (?)

Learning 1.0

Memorize accepted

truth

Find information

Research

Disseminate (?)



"A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically- sound application of knowledge

to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system."

Canadian Institute of Health Research



"A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically- sound application of knowledge

to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system."

Canadian Institute of Health Research



"A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically- sound application of knowledge

to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system."



"A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically- sound application of knowledge

to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system."



"A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically- sound application of knowledge

to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system."

Digital Identity





Digital Identity = Trust



What is your [Digital] identity?

Colleagues

Peers

Professions

Communities

Industry

Policy makers

Maintaining your digital identity

- Audit your digital presence (Google search)
- Establish an accurate public profile

(LinkedIn, Academia.edu, ResearchGate)

- Keep information current
- Monitor new information

(Google alerts, Twitter mentions)



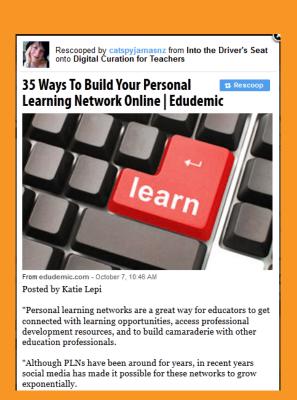
Community

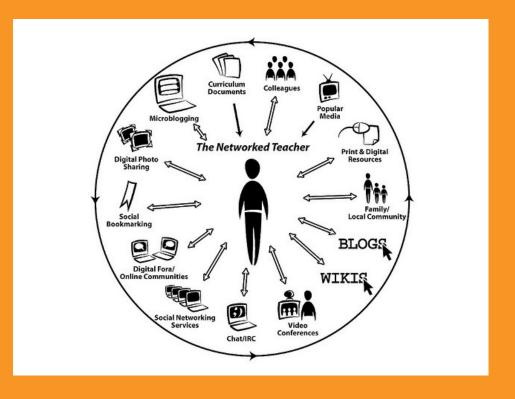




Exchange

Personal Learning Network





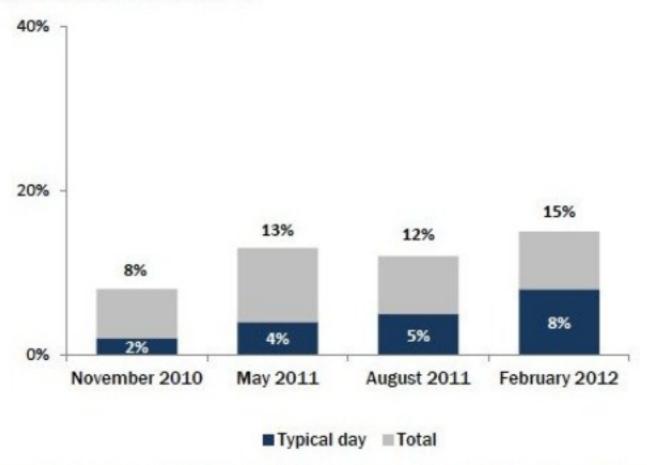
Scooped by Joyce Seitzinger @catzpyjamasnz

Alec Couros' PLN @courosa



Twitter usage over time

% of internet users who use Twitter



Daily Twitter usage among adults doubled in the past year, according to a new survey. (Pew Research Center's Internet & American Life Project Winter 2012 Tracking Survey / May 31, 2012)

2. "#eLearning" @susie Q	3. Me	@	4. "#ed	chat" @susie_mac Q	5. "#mle	earning" @susie	a	6. "#ipa	dchat" @susie Q
Paulo Simões @pgsim 3m Writing & Grammar: Verb Agreement dlvr.it/2KBcMr #elearning #edtech Details Linda Lindsay @maui 25m «Harvard Launching Its First		Kris Paterson @krispat 3d RT @susie_mac: Cool use of Pinterest by St Mary's College library pinterest.com/smclibrary/ < #tlchat will enjoy this! pinterest.com/smclibrary/gra		Marc Turú @marcturu 8h Of course! New Study Links Parent Engagement to School Success huff.to/QjXQGd via @HuffPostEdu #education #edchat sa Retweeted by Meryl Ain		Kim Overman @kimo300 siPad, Google, Android, and Web 2.0 apps to support each level of Bloom's Revised Taxonomy: tinyurl.com/7uau9fn. #edchat #mLearning Details			Joey Chapman @cha 55m "@mgerome3194: @chapmanjoey how about mirroring iPad to pc. Looking for an inexpensive or free app. #sschat #ipadchat #edtech" don't know. Details
Free edX Courses Tomorrow w/ 100,000 Registered Students Bostinno» ow.ly/et69E #elearning #edchat Details Castle Library @castl 25m «Harvard Launching Its First	T T	PhD2Published @PhD2 5d PhD2Published Daily is out! bit.ly/IPINBp ► Top stories today via @harmonygritz @PlutoPress @susie_mac Details	0	InformED @inform_ed 23s @derekbarraza Thanks for the RT! @BlackboardProEd #edchat View 21st Century Teacher 4d		Lenessa Keehn @lene ! Class tool if managed righ MT "@SNewco @cellyme: Cellphone: Class intruder tool? on.app.com/QGy3ql @Rvosseller #edtech #mlearning" Details	t or		Joachim Cohen @Joac 4h Some interesting opinionsnot sure if I agree Dispelling the Myths About 1:1 Environments flpbd.it/bVldI #mlearning #ipadchat Details
Free edX Courses Tomorrow w/ 100,000 Registered Students Bostinno» ow.ly/et64l #elearning #edchat Details almiratantri @almirata 32m Just have had a great skype	Course Park.	CoursePark Team @C 7d The #eLearning Leaders Guide is out! bit.ly/jKuCp2 ► Top stories today via @susie_mac Details Micayla Dunn @Micayla 8d Awesome stuff!	(5)	Love this! - If we taught our teens to drive the way we teach them about social media zite.to/RuKTsv #edchat #learn21 #cpchat #edtech & Retweeted by Amber Flanagan	**	Terese Hogarth @ter 17 Looking for furniture ideas for collaborative learning spaces with #ipad #slide2learn #IWBNet #collaborative #educhat #mlearning Details			Tom Riley @riley_ed 7h Some decent ideas on here - 'How to use Flipboard with your class' ideferrers.com/wp/?p=321 via @deFerrersiPad #ipaded #ipadchat Details
session with @Year5KMatMVPS @year5scpyp @KylieM1985 #flatclassroom #elearning #ibpyp #scpyp Details E-Learning Solution 35m		#aurorahuskies RT @susie_mac: Top 8 Apps for Health Education avatargeneration.com/2012/ 10/top-8 #health #education Details		Christine Ruder @jhox1 2m Brilliant! RT @SNewco: RT @web20classroom: Using Twitter In The Elementary Classroom: bit.ly/Plxsim #edchat Details		Scott Newcomb @SN 48 RT @eyeoneducation: 50 Free Android Apps Being Used in Education Right N bit.ly/UT6NWS @Edudemic #edchat #edtech #mlearni Details	low c		paula wichmann @piw13 9h "@edutopia: Dispelling the Myths About 1:1 Environments bit.ly/Vt1Ad1 #mlearning #ipadchat" @rlpeace1876 @Folmerica @EdSchultheis
Tips for Addressing the Growing Generation Gap in Online Learning: bit.ly/O9eC8u #elearning Details Ray Schroeder @onli 39m #elearning Harvard ready to launch its first free online		Migin Vincent @blacklu 8d RT @susie_mac: RT @susie_mac: RT @KylieBall3: Via @C3health: harness #mobile #tech for greater good @co_health: bit.ly/QCll6A Details		Scott McLeod @mcleod 30d MUSTREAD: Just left the first review of @willrich45's new book, Why School? amzn.to/TQHYij #edreform #iaedfuture #edtech #edchat sa Retweeted by Michelle		Scott Newcomb @SN 48 RT @cellyme: 14 interesting facts about text messaging pinterest.com/pin/233202069 via @Pinterest #texting #mlearning Details	ng g 08	edu	edutopia @edutopia 9h [Most Popular Blog of the Week] Dispelling the Myths About 1:1 Environments bit.ly/Vt1Ad1 #mlearning #ipadchat Details

Twitter

Topic: #KU12

Name: @susie_mac



Synthesis

Community

Wisdom of the Crowd



Synthesis

Curation

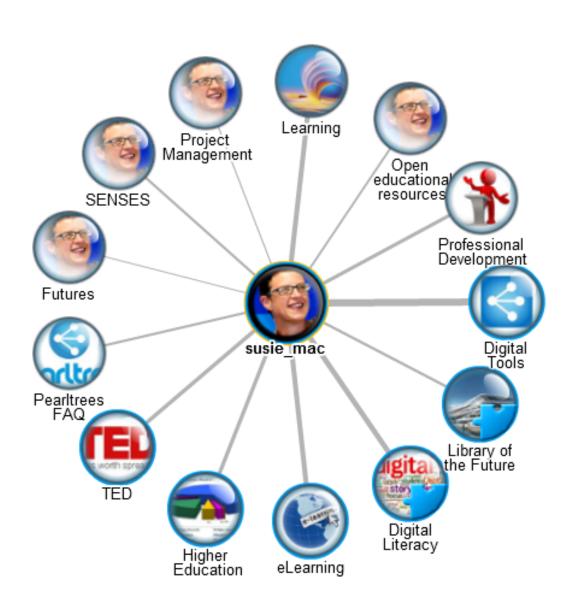




Curation = Quality

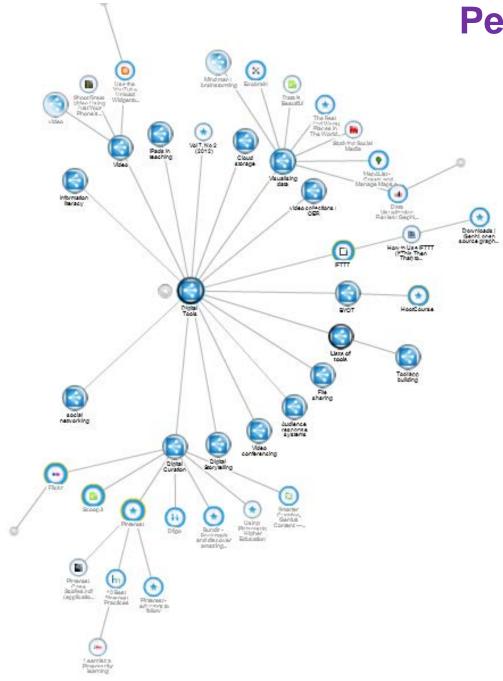


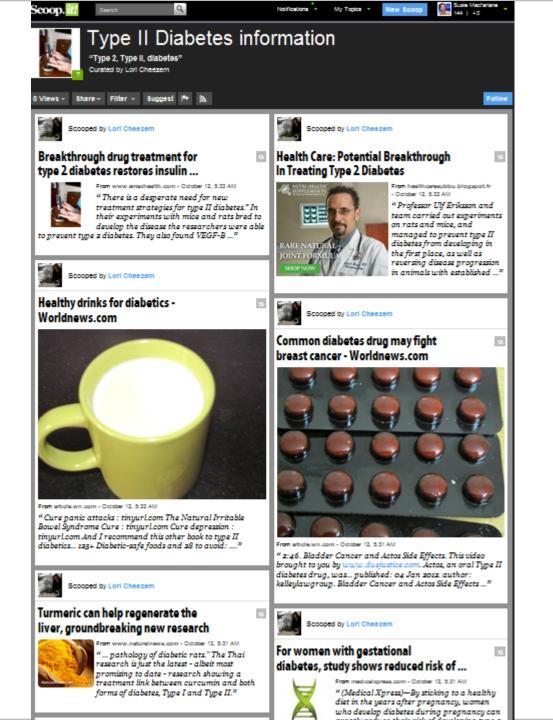
Pearltrees





Pearltrees





Scoop.it



Scoop.it





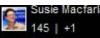
Search



Notifications -

My Topics -

New Scoop



Great curators of My Community *

Show: Posts | Topics | My Community



Robin Good
Curating Content Curation World and 12 more

548.4K Views | 13 Topics





Ana Cristina Pratas

Curating Digital Delights for Learners and 6 more

446.1K Views | 7 Topics





John Evans

Curating iPads in Education

172.5K Views | 1 Topic





Nik Peachey

Curating Tools for Learners and 3 more

159.7K Views | 4 Topics





Giuseppe Mauriello

Curating Social Media Content Curation and 1 more

146.9K Views | 2 Topics





gdecugis

Curating Curation & The Future of Publishing and 8 more

136.3K Views | 11 Topics





Gust MEES

Curating 21st Century Learning and Teaching and 19 more

111.3K Views | 20 Topics





The Digital Rocking Chair

Curating Transmedia: Storytelling for the Digital Age

90.6K Views | 1 Topic





Crowdsourcing



Crowdsourcing: open funding



What is Kickstarter? Discover great projects Start proje

Q Search projects

HELP

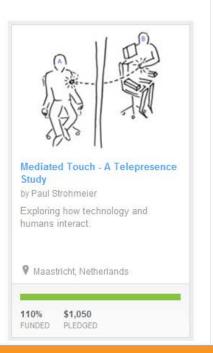
SIGN UP

Discover / Technology

Staff Picks



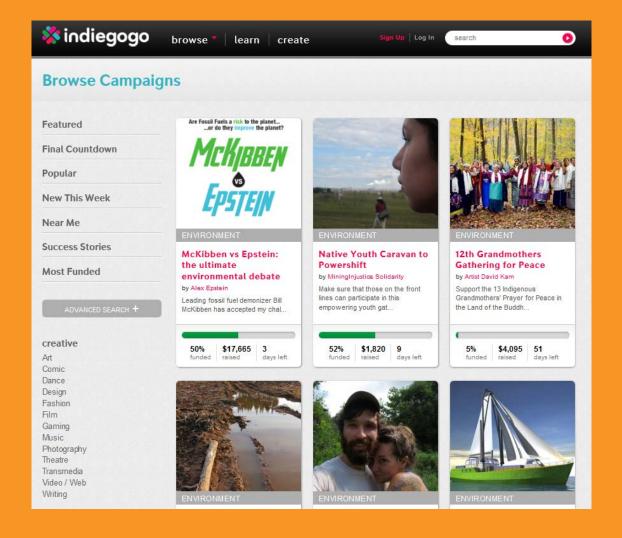






Music

Crowdsourcing: open funding





Crowdsourcing: open innovation



WORLD INTELLECTUAL PROPERTY ORGANIZATION

WIPO RE:SEARCH

About
Database Search
Partnership Hub
How to Participate
FAQs
User Feedback

TECHNICAL ADVISOR TO WIPO

World Health Organization

WIPO Re:Search



One of the world's great global health challenges is to overcome the impact of neglected tropical diseases, malaria and tuberculosis. These diseases negatively affect the lives of more than one billion people, many of whom live in the world's least developed countries. WIPO Re:Search aims to stimulate more research and development for new and better treatment options for those suffering from these conditions.

WIPO Re:Search provides access to intellectual property for pharmaceutical compounds, technologies, and – most importantly – know-how and data available for research and development for neglected tropical diseases, tuberculosis, and malaria. By providing a searchable, public database of available intellectual property assets and resources, WIPO Re:Search facilitates new partnerships to support organizations that conduct research on treatments for neglected tropical diseases, ultimately improving the lives of those most in need.

WIPO Re:Search is partnered with BIO Ventures for Global Health.

WIPO Re:Search flyers are available in english, spanish, french, and portuguese

LATEST NEWS

- WIPO Re:Search covered by Financial Times as "A shared way forward offers hope" (Oct 11, 2012)
- Wipo Re:Search Snapshot October 2012 (Oct 9, 2012)
- October 2012 issue of "European Biopharmaceutical Review" features WIPO Re:Search (Oct 4, 2012)
- [Archive]



Social media



Social media: issues

Is the target individual, policy or population level change?

Does the project include a social media strategy?

Does your group possess expertise in social media?













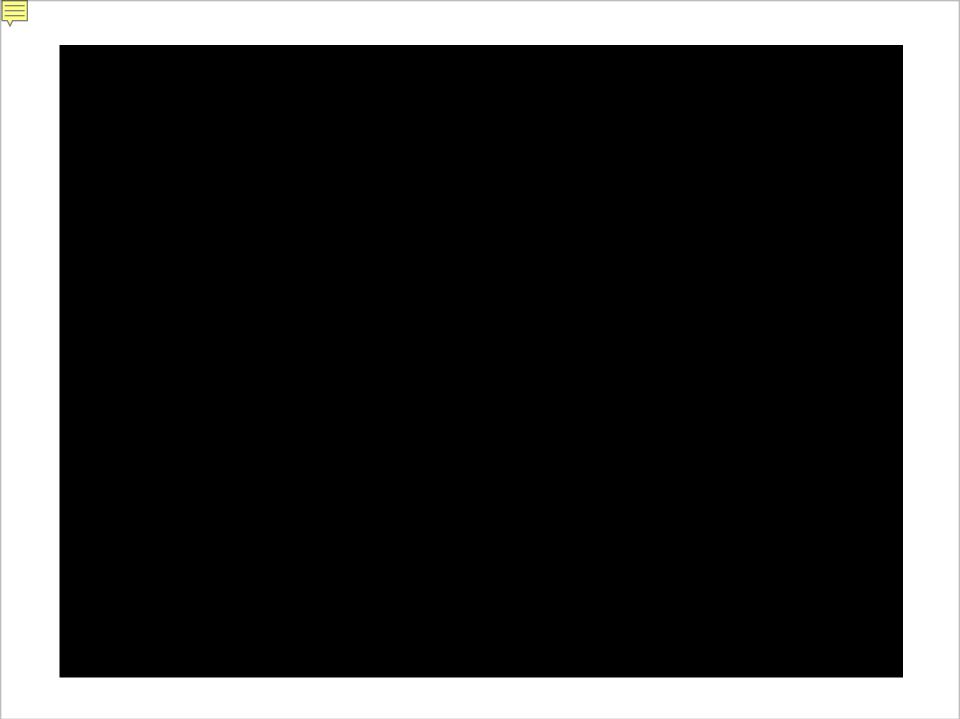




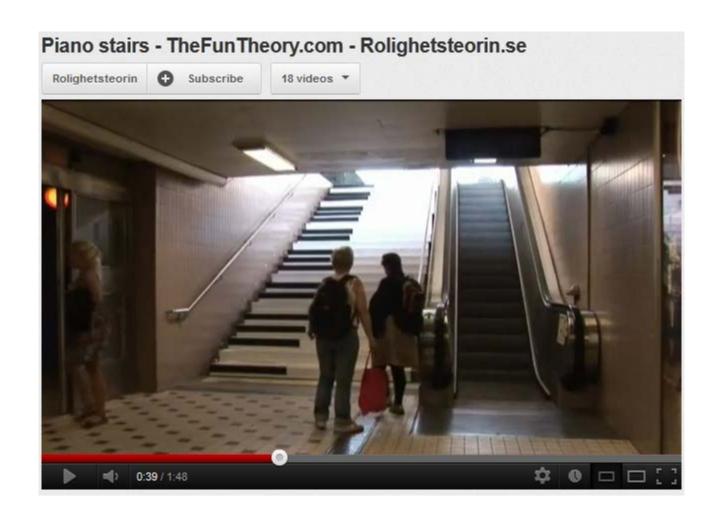


Behaviour change









Odenplan, Sweden



Piano stairs - TheFunTheory.com - Rolighetsteorin.se





Mobile



Mobile

- Mobile data collection
- Location based data GPS

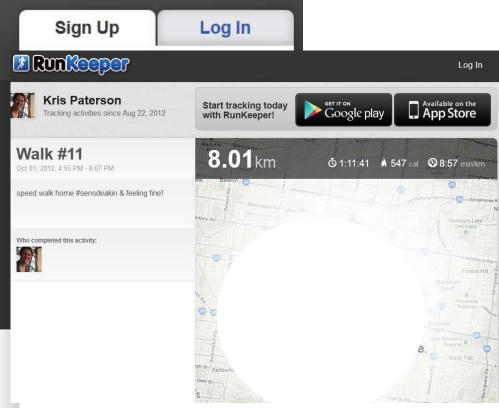
Issues:

- Access
- platform compatibility

A personal trainer in your pocket.

RunKeeper makes tracking your workouts fun, social, and easy to understand that you can improve the quality of your fitness.





By signing up you are agreeing to the RunKeeper Terms of Service and Privacy Policy



Mobile

Augmented reality

Localisation
Context awareness
Intelligent interaction

Apps: Layar, Sunseeker Airplay in The Age



Freescale: Home Health hub



Layar platform



Mobile

QR codes

Mobile tagging of real world objects with digital information





Gamification



PUZZLES CATEGORIES GROUPS PLAYERS RECIPES CONTESTS
BLOG FEEDBACK FORUM WIKI FAQ ABOUT CREDITS



Top Groups

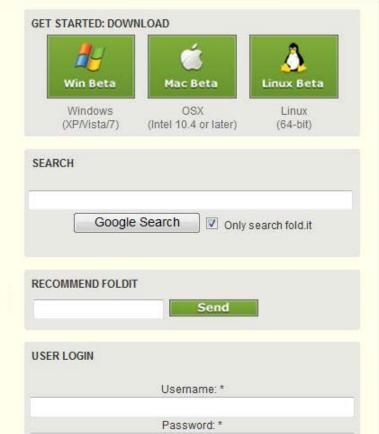
FoldIt@Netherlands

#10

Search: Find

755

RANK	GROUP	GLOBAL SCORE
#1	Anthropic Dreams	5327
#2	Contenders	4793
#3	Void Crushers	3825
#4	Go Science	3229
#5	Beta Folders	3134
#6	foldeRNA	2587
#7	L'Alliance Francophone	2438
#8	Team Hungary	1225
#9	Gargleblasters	943



Log in

Create new account
 Request new password









SuperBetter helps you achieve your health goals — or recover from an illness or injury — by increasing your personal resilience. Resilience means staying curious, optimistic and motivated even in the face of the toughest challenges.

ABOUT BLOG SEE HOW TO IT WORKS CONTACT US PRESS





LATEST NIKE+ ACTIVITY

See what's happening in Nike+ around the world.







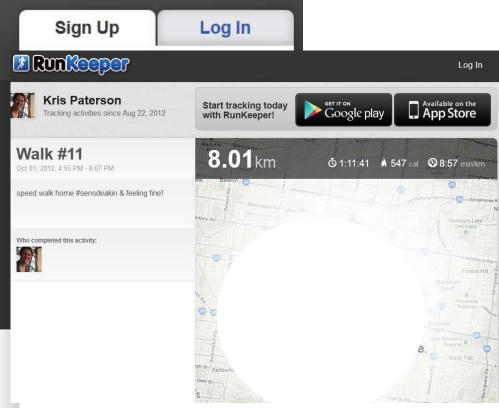
JOIN THE NIKE+ COMMUNITY



A personal trainer in your pocket.

RunKeeper makes tracking your workouts fun, social, and easy to understand that you can improve the quality of your fitness.





By signing up you are agreeing to the RunKeeper Terms of Service and Privacy Policy



Gamification of healthcare

- Urgent optimism {progression / goals}
- Social networking {social connection}
- Blissful productivity {flow}
- Epic meaning {belonging/purpose}





Evaluation and analytics

CIHR processes	Strategies	Tools			
Establish platform	Establish identity Build PLN Community				
SYNTHESIS	Curate				
EXCHANGE	Microblogging Video				
DISSEMINATION	ALL				
APPLICATION	Beh. change Gamification				
Evaluate	Analytics Gamification				



Top 3 survival Flourishing tips

#1

Value your learning



Top 3 survival Flourishing tips

#2

Build a network



Top 3 survival Flourishing tips

#3

Cross boundaries



"Technology does not drive change. Technology enables change. It's our collective response to the options and opportunities presented by technology that drives change."

Paul Saffo, futurist

Thank you



susiem@deakin.edu.au

Resources

- Gamification examples: <u>Superbetter.com</u>, <u>Fold.it</u>, <u>Nike+</u>, <u>Runkeeper.</u>
- Horizon Report
- Jane McGonigal (2012) The game that can give you 10 extra years of life (video)
- Manuael Lima: The Power of Networks (RSA <u>video</u>)
- Newboldl, K, Campos, S (2011) Media and Social Media in Public Health Messages: A Systematic Review. Available online
- Video campaign: <u>Troy Library</u>
- Augmented Reality: <u>Layar</u>, <u>Sun seeker</u>

