

The Future Skills of Research

Research 1-2-3

Wong, Woei Fuh PhD MBA

Impact

Visibility

Citations

1

authoring

find the questions

2

publishing

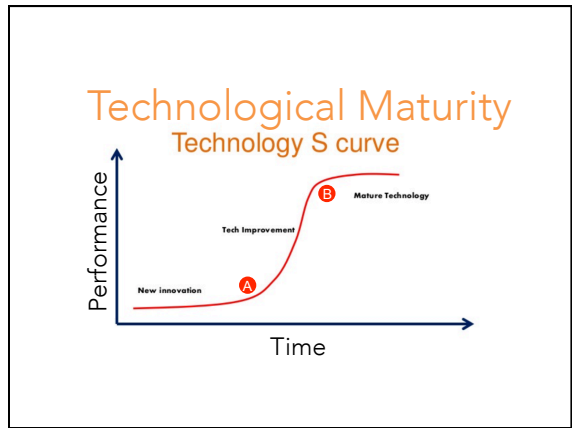
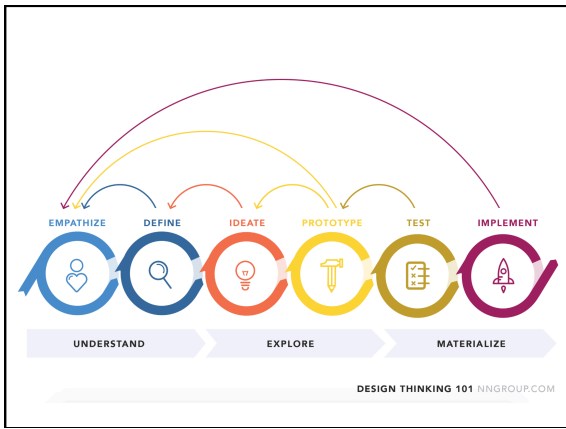
find the channels

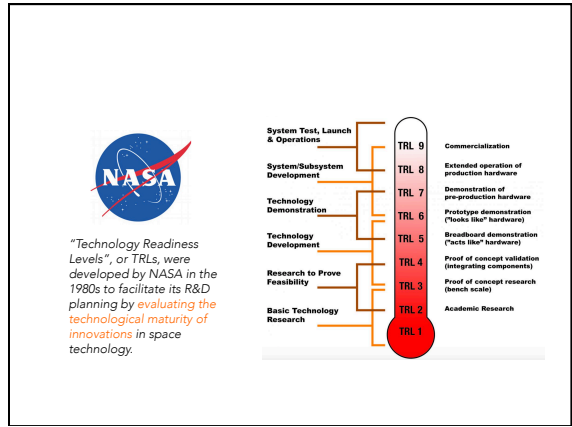
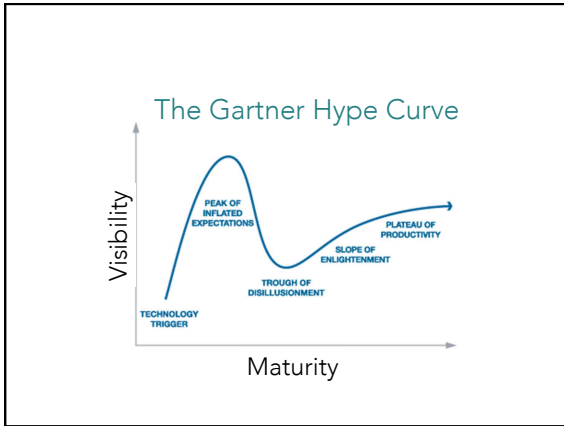
3

outreaching

find the audiences

1 find the QUESTIONS



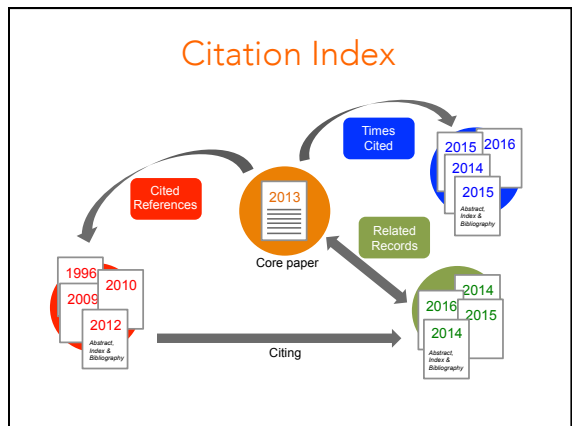


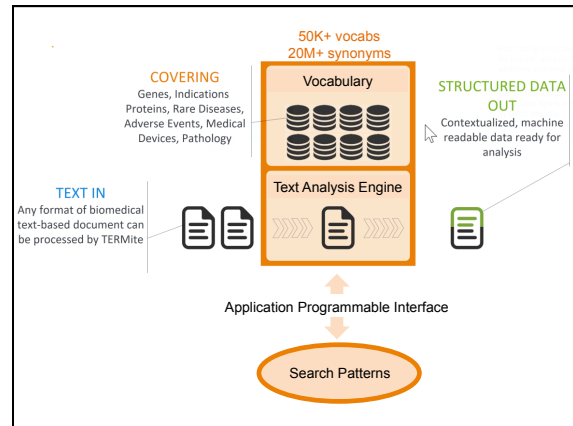
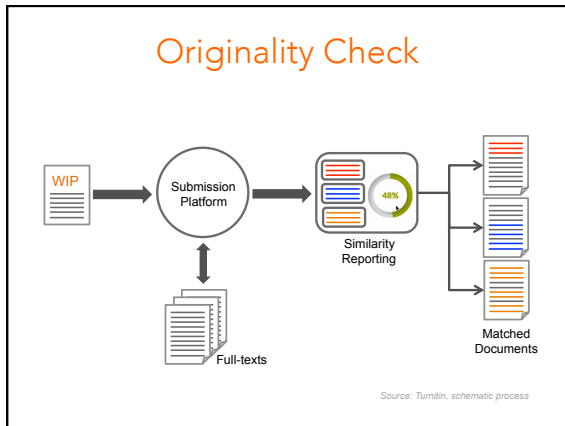
The Naming Crisis graphic features a word cloud of disease names including 'Schilders Syndrome', 'Epileptitis Peritonsillaris', 'Alpers Disease', 'Christensen Disorder', 'Toucan-Schilder Disease', 'Hemmer-Schilder Disease', 'Alpers-Huttenlocher Syndrome', 'Subcortical Central Sclerosis', and 'Diffuse Central Sclerosis'. Below the word cloud, it says '90% knowledge' with a PDF icon and an image of an open book.

The screenshot shows a research visualization tool interface. At the top, there is a search bar with 'Google Scholar' and 'Baidu 学术' logos. Below the search bar, there are various filters and a search button. The main area displays a visualization of research data, with the text '研究领域可视化分析, 相关文献深度挖掘' (Research field visualization analysis, related literature deep mining) and 'Stand on the shoulders of giants'.

The screenshot shows the Google Scholar search results page. Below the search bar, there are three numbered points:

- 1 Search without understanding**
Google Search is to hunt for text in publicly accessible documents that have been indexed by their crawler
- 2 Poor scientific synonym & semantic capabilities**
Google has very basic capabilities with no detailed scientific entity classification nor synonym/disambiguation capabilities
- 3 "PageRank"**
Priority rank plays large part in selection. Unidentified information ranks lower than known information – a potential fundamental weakness for an engine that has no specialized scientific entity classification





Controlled Vocabularies

- Controlled Vocabularies
- Taxonomies
- Thesauri
- Ontologies

NOT

Designed to assist authoring

MeSH: Hierarchically-organized terminology for indexing and cataloging of biomedical information

MedDRA: Standardised medical terminology to facilitate sharing of regulatory information internationally for medical products used by humans

The Human Phenotype Ontology (HPO): vocabulary of phenotypic abnormalities encountered in human disease

Detours and Diversions – Do Open Access Publishers Face New Barriers?

BY KENT ANDERSON | MAY 31, 2017 | 4 COMMENTS

AUTHORITY | COMMERCIAL | CONTROVERSIAL TOPICS | DISCOVERY | ECONOMICS | ETHICS | INNOVATION | OPEN ACCESS | RESEARCH | SOCIAL MEDIA | TECHNOLOGY

Why do specific goals of open access (OA) publishing aren't automatically shared goals, the overriding articles is to make scientific knowledge study available to everyone, with no barrier.

The barrier that have historically informed OA strategies – subscription paywalls and large commercial publishers – have proven to be insurmountable. Publishers have changed a great deal, and most are now open access or full completely open relative about charge paywall. There are public access policies in place for more than 95% of research funded by the US government. Hybrid and green OA publishing have become more commonplace. Yet, journals and commercial publishers remain elusive in discussion about OA.

Top 100 Articles 2016

Online Collaboration

6 reasons of online collaboration

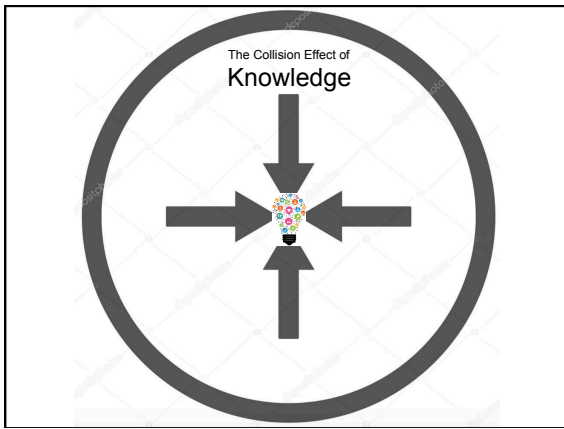
1. Follow discussions
2. Post (work) content
3. Discover peers
4. Comment on research
5. Discover recommended papers
6. Share links to authored content

Source: Richard V Noorden, "Online collaboration: Scientists and the social network", Nature: International weekly journal of science, 13 August 2014

Online Collaboration

7 ways to increase online visibility

1. Post early results
2. Encourage feedbacks
3. Post published work
4. Post video of talk
5. Share within community
6. If possible, publish as success story
7. Update research directory



101 INNOVATIONS IN SCHOLARLY COMMUNICATION

THE CHANGING RESEARCH WORKFLOW

Science is in transition. This poster gives an impression of the exploratory phase of a project aiming to start innovation in scholarly information and communication flows from evolutionary and network perspectives.

We intend to address the questions of what drives innovation and how these innovations change research workflows and may contribute to more open, efficient and good science.

101 Innovative tools and sites in 6 research workflow phases (< 2000 - 2015)

Most important developments in 6 research workflow phases

Typical workflow examples



Intentional or unintentional?

- Plagiarism (text, data and evidence)
- Self plagiarism (e.g. duplicate publication) & self citation
- "Salami slicing"
- Publishing everything versus selective publishing

Source: Marcel A. L. M. van Assen et al, "Why publishing everything is more effective than selective publishing of statistically significant results", *journals.plos.org*

Highly intentional

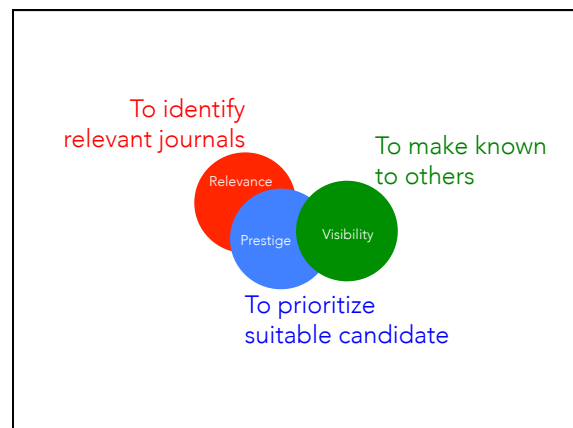
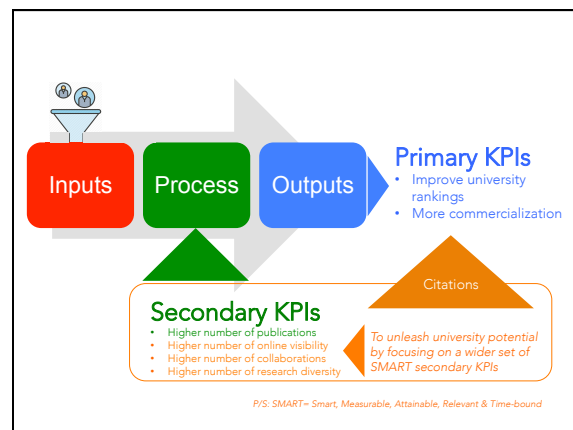
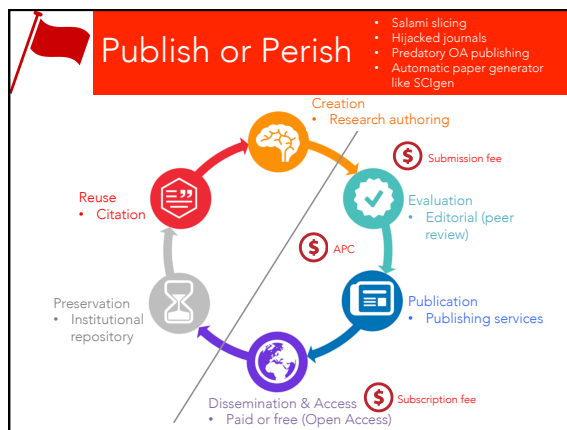
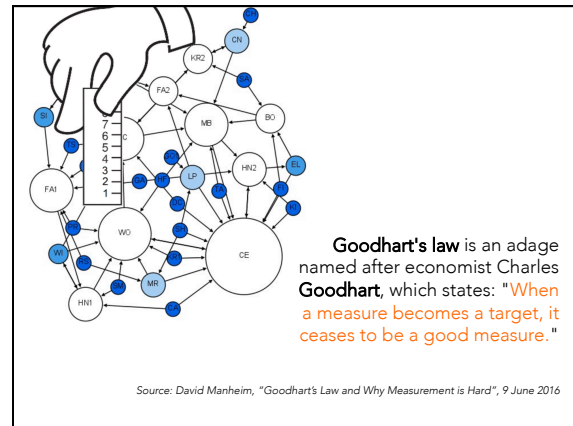
- Ghost authorship
- Fraud (data/evidence falsification)

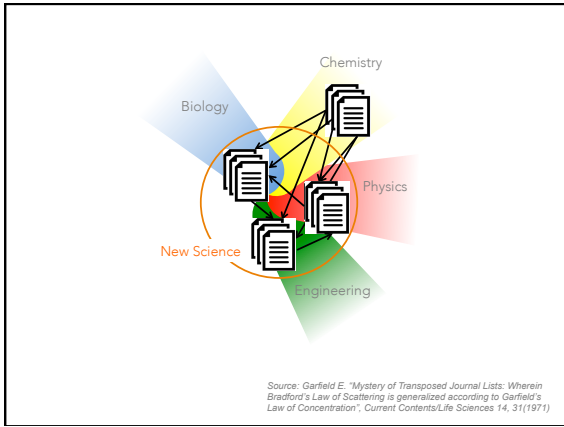
A cartoon illustration of a person's hands on a computer keyboard, with a large 'COPY PASTE' button highlighted. The person is wearing a red t-shirt with the word 'CREATIVITY' on it.

"How to define the level of plagiarism?"

Feature	Least severe			Most severe
Extent	A few words	A few sentences	Whole paragraph	Several paragraphs Whole paper
Originality of copied material	Widely-used phrase/idea		Phrase/idea used by a few authors	Original phrase/idea
Position/type of material	Standard method		Describing another's work	Data/findings
Referencing/attribution	Source fully and clearly referenced		Source partially/inaccurately referenced	Unreferenced
Intention	No intention to deceive			Intention to deceive

Source: Elizabeth Wager, "How should editors respond to plagiarism?"
COPE Discussion Paper, 26 April 2011, <http://publicationethics.org/resources/discussion-documents>





Data Sources

- Citation is the "currency" of research

Metrics

h-index

Journal rankings

- CiteScore
- SCImago JI
- Impact Factor

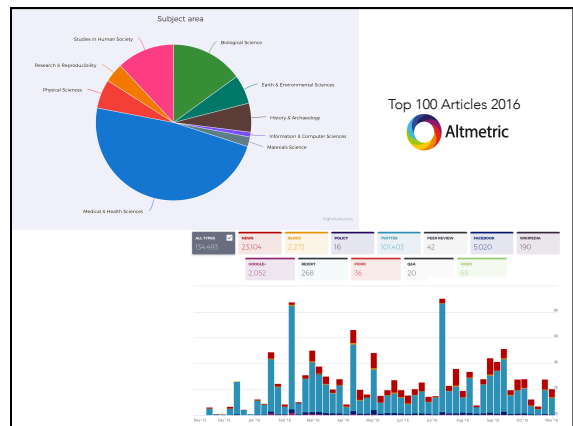
20%-30% university rankings

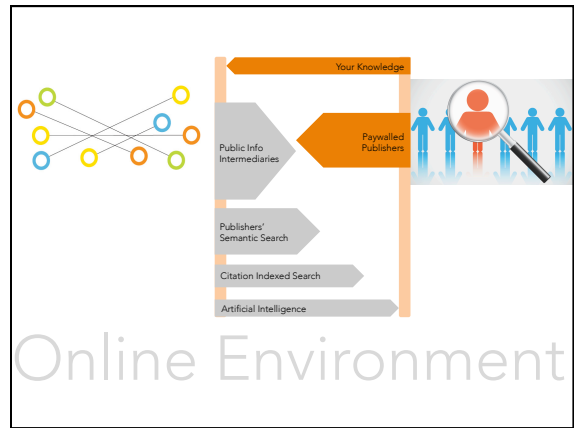
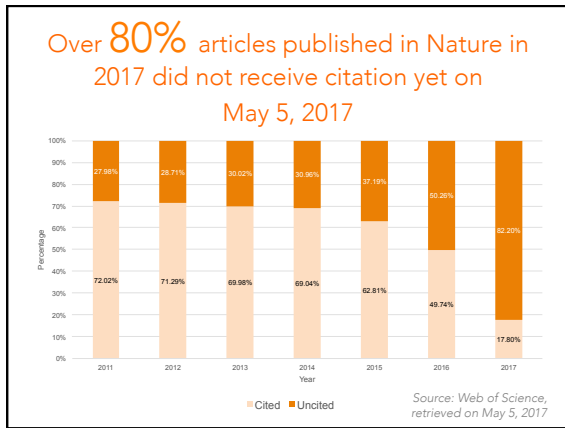
Journal Selection Criteria

Journal Selection Process for the Abstracts & Indexes (A&I)

- Basic journal publishing standards
 - Timeliness
 - Editorial convention
 - English language bibliography
 - Peer review
- Editorial contents
 - Category
 - Level of multidisciplinary
- Global diversity
 - Core journals
 - Authors/editors
- Citation analysis

Source: Web of Science, Journal Selection Process





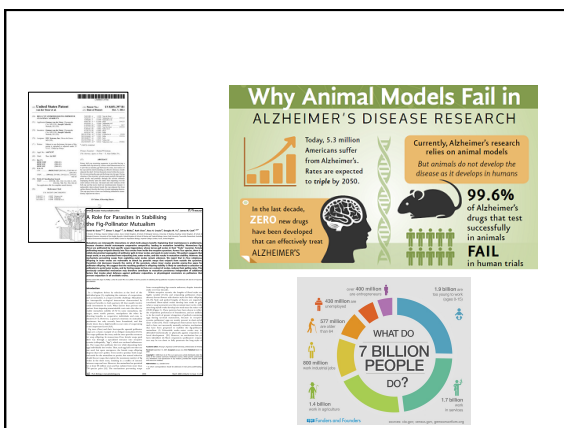
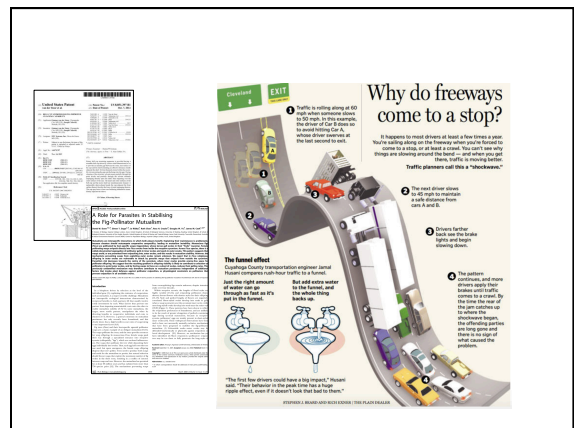
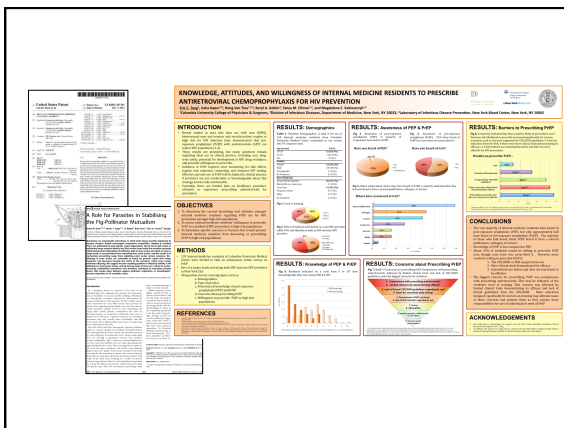
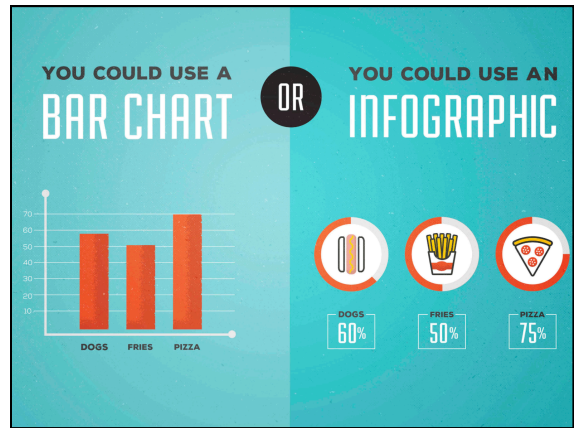
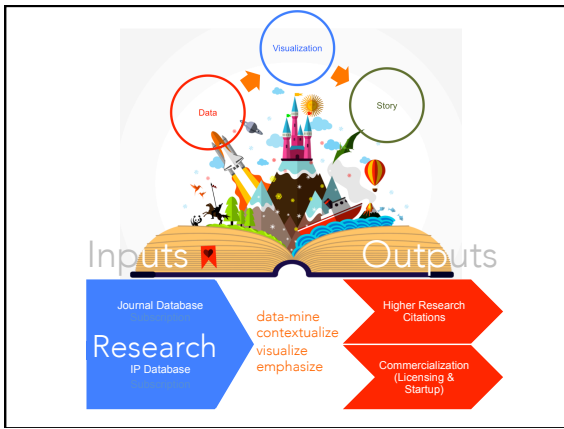
Wherever you publish or share your work, use Kudos to make this more effective:

- Open up your research to new audiences can find and understand it.
- Track the most effective means for getting your work read, discussed and cited.
- Learn where to focus your efforts to make best use of your time.
- Improve the metrics by which you are evaluated.

Name	Articles	Views	Engagements	Country
Dr. Nicholas Ozols	30	628	90	United States
Joanna Boyato	10	234	727	United Kingdom
Professor Phil Galt	366	635	29	United Kingdom

Explain it!





Plain Language Summary

KUDOS

Karine Dupre
 Assistant Professor, Department of Psychology and Neuroscience, University of Colorado Boulder

Original Abstract

Abstract
 The purpose of this paper is to study the relationship between subjective and objective measures of the readability of the abstracts from researchers at the University of Colorado Boulder.

- Important structure and language for specialists
- But takes time to read even the abstract
- And not easy for non-specialists to understand

Publisher's Comment

Emerald

Usage of full-text articles trebled for those authors using the Kudos tools

<http://www.emeraldgroupublishing.com/cboaj/news/11m/11m16-6247>

Simple Summary

What's it about?
 From the authors: This paper is about understanding how the actual content of a Dissertation in the City of Boulder leads to results and reviewer preferences about this development.

Why is it important?
 From the authors: Research is being done by the Department of Psychology at the University of Colorado Boulder to understand how the actual content of a Dissertation in the City of Boulder leads to results and reviewer preferences about this development.

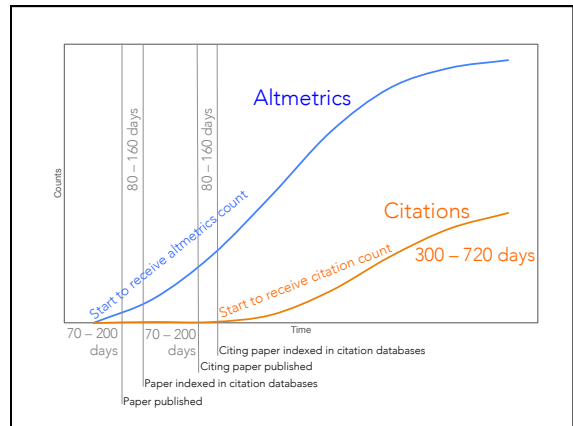
Perspectives
 Karine Dupre (Author): While other cities, the City of Boulder is really unique and it's bringing in a lot of people from all over the world who are really supporting the research. It's a great place to be and it's really exciting to see the results of the research.

- Quicker for specialists to scan and filter
- Easier for non-specialists and speakers of other languages to understand
- Better for engagement with media and the public

Kudos for Publishers – Clients

Acoustical Society of America	FASEB
American Association for Clinical Chemistry	Nature Science Group
American Association of Petroleum Geologists	Glass Free
American Coal/Intelligence Association	Hogrefe Publishing Group
American Institute of Aeronautics and Astronautics	The IET
American Nuclear Society	Endocrine Society
American Physical Therapy Association	INSEP
American Society for Nutrition	INFORMA
American Society of Anesthesiologists	Institute of Atmospheric Physics, Chinese Academy of Sciences
American Society of Microbiology	International Anesthesia Research Society
American Society of Neurology	International Union of Crystallography
American Speech-Language-Hearing Association	IOS Press
American Thoracic Society	International Water Association
Amsterdam University Press	JBJS Inc
Association for Computing Machinery	John Benjamins
ACM International	Journal of Neurosurgery Publishing Group
Bentham Science Publishers	Journal of Orthopaedic & Sports Physical Therapy (JOSPT)
Bioelectromagnetics	Karger
Bone & Joint	Liverpool University Press
BSI	Mark Allen Group
Cambridge University Press	Manchester University Press
Chinese Association of Automation	The MIT Press
Cognit	NACE
Cognitant Communication Corporation	OSCD
De Gruyter	Palis Press
Dove Medical Press	Qeioscience
Duke University Press	SAGE
Edinburgh University Press	Science Reviews 2000
ESP Sciences	Taylor & Francis
Emerald Group Publishing	Trent Tech
Eschale	Springer University Press
European Respiratory Society	UCL Press
European Society of Cardiology	University of California Press
FIGO Research	Wolters Kluwer Academic Publishers
	Wiley

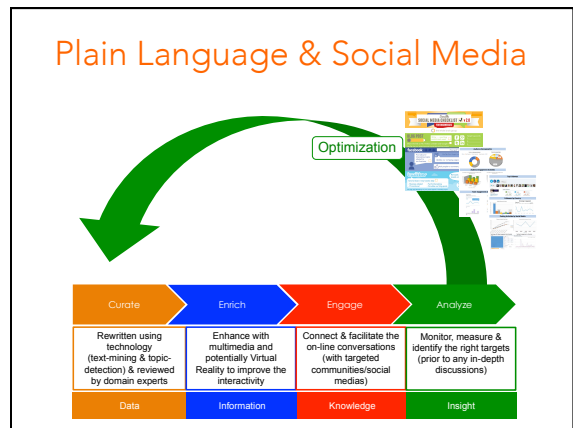
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NATIVE ADVERTISING

CONTENT MARKETING

"what you do" vs "why you do"



1 Before curation (patent) → After curation (plain language)

Systems and methods for portable exergaming

ABSTRACT
In a first aspect, a system for playing a video game is provided that includes (1) one or more sensors adapted to monitor one or more biometric parameters of a user and communicate the one or more monitored biometric parameters (MBPs), (2) a computing device adapted to communicate with the one or more sensors and to receive the one or more communicated MBPs, and (3) a video game having an avatar adapted to move an object on an in-line, the video game adapted to execute on the computing device. The video game is adapted to control the avatar to perform an action in the video game based in part on the received one or more communicated MBPs. Numerous other aspects are provided.

DESCRIPTION CROSS REFERENCE TO RELATED APPLICATIONS
This application is a continuation of and claims priority from U.S. patent application Ser. No. [redacted]

Confidential

each of which is hereby incorporated by reference herein in its entirety for all purposes. [redacted]

Exergaming

Exergaming, which is game playing for exercise purposes, has become an emerging approach in elderly healthcare as a means to encourage elderly to do physical exercises through enjoyable game scenarios. While most of existing exergames target physical fitness and motor movement, integration of cognitive exercises into exergames is scarce.

Microsoft Kinect is used as the input of choice to capture the body's movement without the need of using a game controller or additional attached sensors.

As the elderly users are engaged in natural and intuitive movements, their brain neurons are also activated by complex stimuli from the environment (e.g., color, rhythm). Challenging tasks that employ various cognitive functions (e.g., divided attention, switching, short term memory) are also interwoven to promote active cognition.

- For the task of selective attention, two balls will fly out simultaneously, where only the ball of a specific colour is the target.
- For the inhibition task, the ball in some rounds will be of a different colour, and players are required to ignore balls of a given colour while hitting balls of other colours. The innovative data analysis tools at the back end enable healthcare professionals to easily track the health conditions of each individual elderly user under their care, and assist in crafting personalized training programs.

2 Enrichment → Exergaming

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Engagement 3

time an elderly to sit of legation of



movement sensors.

s, their format (e.g. files, e.g. n to

Engagement 3

ABOUT THIS GROUP
Allows Knowledge Management experts to share best practices around the globe.
4,956 members
Invite others

Medical Devices Group
2017 members

ABOUT THIS GROUP
ECHA provides a forum for discussion and presentations on electronic component issues, new applications and technologies, formal standards development and maintenance plus conferences and seminars.
This forum is a direct input for areas to be addressed by programs and services of ECHA and related organizations.

Fun facts/ Sharing/ Case Studies

3.1

The Benefits of Exergaming Positive Gaming, studies have shown that exergames, elevates energy expenditure to moderate or vigorous activity, and can indeed offer the same health benefits as traditional exercise. There is a growing number of studies, ... more

Exergaming |
Exergaming, which is game playing for exercise purposes, has become an emerging approach in elderly healthcare as a means to encourage elderly to do physical exercises through enjoyable game scenarios. While most of existing exergames target physical fitness and motor movement, integration of cog... more

In a study of 102 elderly adults, researchers found that those who were randomly assigned to ride a stationary bike was equipped with a virtual reality screen that allowed the riders to "take" through different environments as ... more

Virtual Exercise Games Help Elderly Remain Mentally Sharp | TIME.com
Exergaming - video games aren't just for kids any more. Navigating virtual worlds helps grandmas and grandpas stay physically and cognitively healthy.

Facebook LinkedIn Twitter

146 impressions 2 clicks 1 interaction 2.05% engagement

124 impressions 0 clicks 0 interactions 0.00% engagement

News/ Articles

3.2

13 healthcare predictions for 2016. 1.A second wave of digital health disruption . 2 Less loggins, more moonshots 3 Rise of the Maker Movement will customize health 4 The Leapfrog Effect materializes in underserved markets 5 Artificial ... more

2016 Predictions: Digital Health's Second Wave And Thirteen Transformative Healthcare Trends
This year, we've seen dramatic developments in the movement to transform healthcare. The digital health ecosystem has its stride, becoming a significant part of the healthcare economy. With 2015 giving some hints of what's to come, here are 13 healthcare predictions for 2016 and beyond.

10 trends for the next 20 years that will help us live healthier, stronger and sm... lives. for LONGER http://ow.ly/W5WN

10 Digital Health Trends for the Next 20 Years
The Digital Health Revolution is upon us. Here are the ten trends that will impact each and everyone of us in the coming years to help us live healthier, stron...

353 impressions 3 clicks 2 interactions

364 impressions 3 clicks 1 interaction 1.10% engagement

Questions-and-Answers

3.3

60% of tweets are positive about Parkinson's disease. Discover how games can help? http://ow.ly/W5Wd

SOCIAL EMOTIONS LIVE DASHBOARD

A predictive Parkinson's disease analytic and rehabilitation game (Newyong Technological University - US Research Lab)

Exergaming: Can Exercise Games Help You Get Fit? Challenging tasks that employ various cognitive functions (e.g., divided attention, switching, short term memory) are interwoven to promote active cognition. For the inhibition task, the ball in some ... more

Exergaming |
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Facebook LinkedIn Twitter

131 impressions 1 click 2 interactions 2.29% engagement

Application

3.4

Exergames can improve fitness in autistic kids. The findings suggest the use of exergames — video games that are also a form of exercise — has the potential to serve as a valuable addition to therapies for children with autism spectrum disorders who ... more

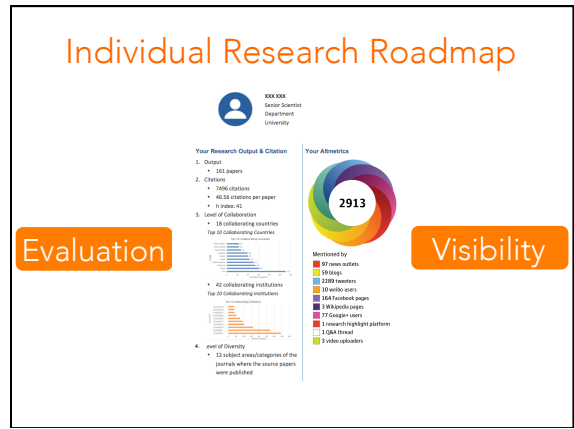
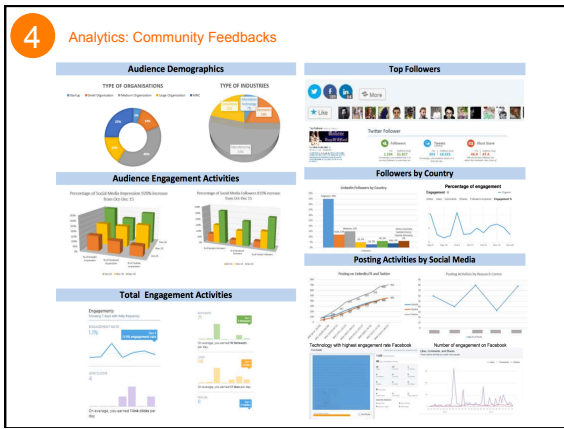
Exergames can improve fitness in autistic kids
Exergames - video games that are also a form of exercise - has the potential to serve as a valuable addition to therapies for children with autism spectrum disorders .

Exergaming can be particularly beneficial to overweight children and those who do not usually participate in any kind of physical activity. For one thing, it provides them with a quality exercise tool and a healthy alternative to the regular kind of video games, which are often blamed for the part they play in childhood obesity. For another, the addictive nature of video games is precisely what makes exergaming intrinsically motivating. Another reason why exergaming is particularly well suited to overweight children is that they burn more calories during the exercise than normal weight children. #NM_assetstore #NTUsgs #HLLY less

Facebook LinkedIn Twitter

63 impressions 0 clicks 1 interaction 1.59% engagement

288 impressions 0 clicks 0 interactions 0.00% engagement



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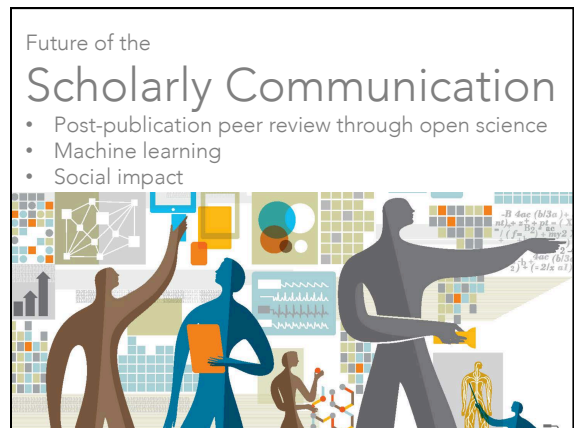
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- 2 ADD YOUR INFO** Enhance your ORCID record with your professional information and link to your other identifiers (such as Scopus or ResearchID or LinkedIn).
- 3 USE YOUR ORCID ID** Include your ORCID identifier on your Website, when you submit publications, apply for grants, and in any research workflow to ensure you get credit for your work.

LATEST NEWS

- Mon, 2016-07-18 Being a digital academic
- Wed, 2016-07-13 Hindawi and ORCID: The Truth
- Mon, 2016-07-11 ABES and ORCID: Partners in Understanding



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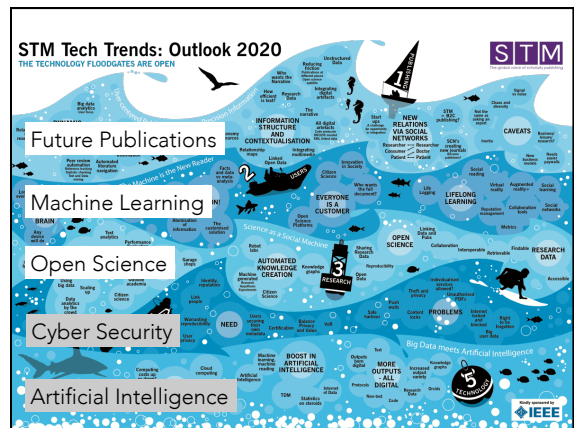
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REF 2014 Impact Case Studies

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Search all Case Studies

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Browse the index

Submitting Institution | Unit of Assessment | Summary Impact Type | Research Subject Area | Impact UK Location

Impact Global Location

Submitting Institution

Type Institution name

East	1400	East Midlands	4000
Anglia Ruskin University	000	Bishop Grosseteste University	00
University of Bedfordshire	004	De Montfort University	010
University of Derby	007	University of Derby	011
Cardiff University	009	University of Leicester	000
University of East Anglia	004	University of Lincoln	000
University of Essex	000	Loughborough University	011
University of Hertfordshire	000	University of Northampton	011
Nottingham Trent University	001	University of Nottingham	000
Wrexham College	001	Huddersfield New University	000
London	11000		
Birkbeck College	011	London Business School	011
Brunel University	010	London Metropolitan University	004
City University, London	000	London School of Economics & Political Science	000
Courtauld Institute of Art	001	Political Science	
University of East London	011	London School of Hygiene & Tropical Medicine	004
Imperial College	000	Tropical Medicine	
University of Greenwich	000	London South Bank University	010
Goldsmith School of Music & Drama	001	Middlesex University	000
		Queen Mary University of London	010
		Royal Wulfric's College	011
		School of Oriental & African Studies	000
		St George's University of London	01
		London	
		St Mary's University	014
		Teichmair	
		Trinity Laban Conservatoire of Music & Dance	00
		University College London	000

By 2020, These 10 Employee Skills Will Soon Be In Huge Demand!

Source: Larry Kim, "By 2020, These 10 Employee Skills Will Soon Be in Huge Demand", The Mission, 27 April 2017.

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Thank YOU