THE CONVERSATION

Impact Through Media Collaboration

May 2013

State of the media



- Busine ss modelimploding:
- Dumbed down
- Info m a nia
- Se nio r + sp e c ia list jo uma lists le a ving
- Trust e m d e d



GONE...

Adam Cresswell, healtheditor The Australian

Le ig h Dayton, science writer The Australian

Deborah Smith, science editor SMH

Mark Me the rell, he alth correspondent SMH, The Age

Julie Robothom, medicaleditor SMH

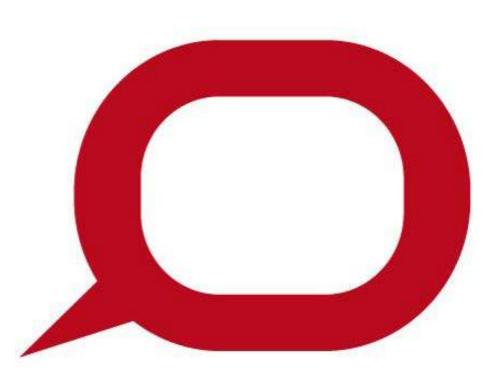
Found! The last untapped goldmine



- Credible and independent info and experts
- Tho usands of specia lists
- Turn the university into a Giant Newsmom!

The Conversation Charter

- Unlock the knowledge and expertise of researchers and academics to provide the public with clarity and insight into society's biggest problems
- Give experts a greater voice in shaping scientific, cultural and intellectual agendas by providing a trusted platform that values and promotes new thinking and evidence-based research
- Provide a fact-based and editoriallyindependent forum, free of commercial or political bias



Pipe line of information direct to the public

- 15 commissioning editors
- Global university networks
- State of the art site: direct to the public
- Editorial Board: se nior academics, bound by a charter

Experienced and passionate editors























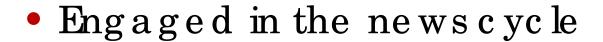


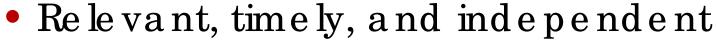






Ac a de mic s into jo uma lists

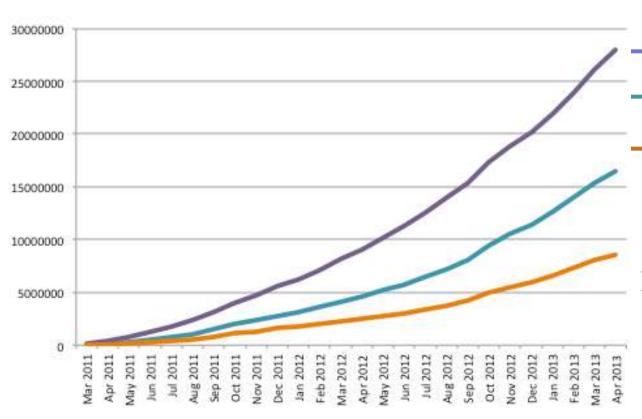




- Publish 7.00am and 2.30pm and whenever we get the good stuff
- Accessible free via highly use able, interactive website



How we're doing - KPIs



Source: Google analytics. Last Updated: 1 May 2013

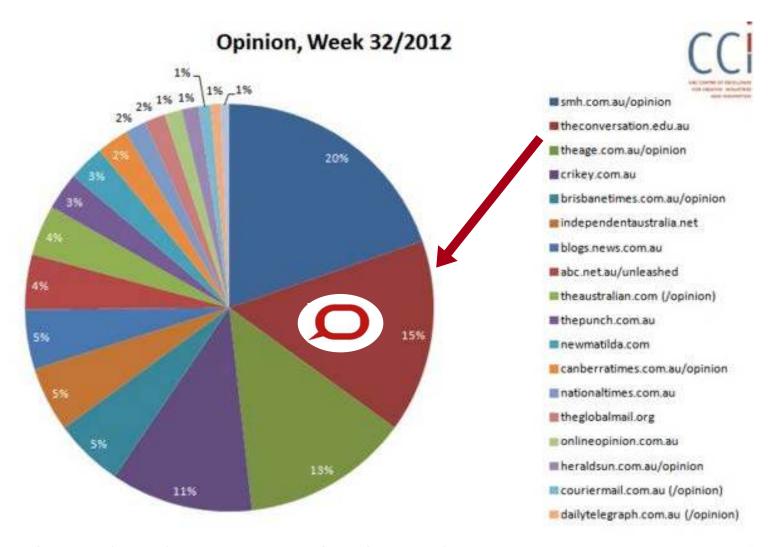
Traffic and reach

- **–** 23.9m page views
- 13.9m visits
- 7.2m unique visitors (35% international)

Engagement

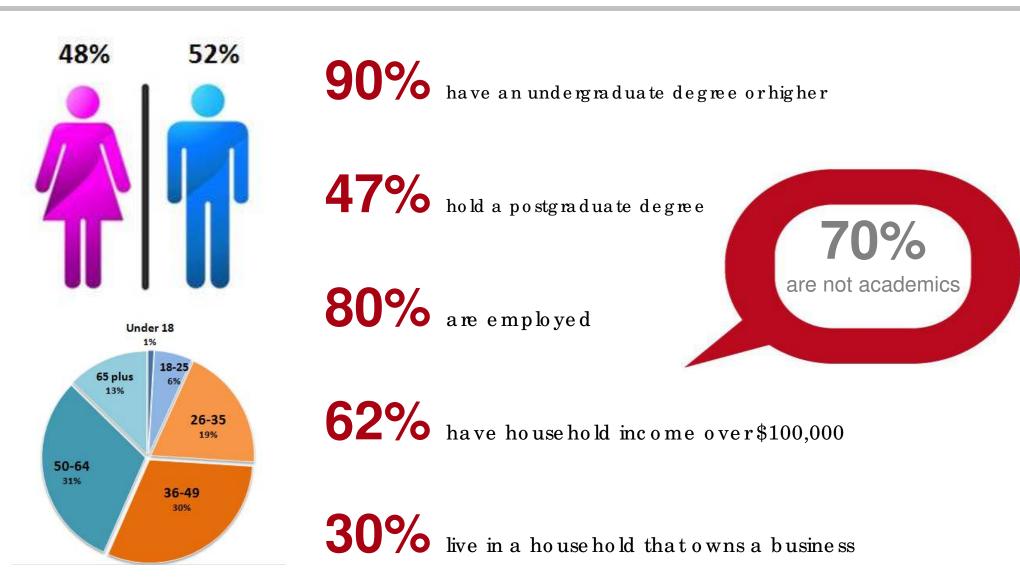
- -5,300 authors
- 289 institutions
- 10,000 articles
- -125k+comments
- 5K+ republications

Most Tweeted Oz Opinion sites



So urc e : Austra lia n Twitte r Ne w s C irc u la t io n ln d e x

Smart, engaged community



Source: TC reader & author survey, March 2012

Seeding the media



- 58% of a rtic les republished
- 43% of authors contacted by media















HUFFPOST SCIENCE



Case studies: Policy development

- Future of Higher Ed: panel of TC authors in disc ussion with Minister Evans. Opportunity to shape policy debate
- Authorcallout, 120+ submissions
- Se rie s 50 K re a d e rs; 2 K c o m m e n ts,
 FB a nd Twitte r inte ra c tio ns
- 5 pane lists presenting to mom of 50, with 4K in live-stream and a Twitterdebate that trended.

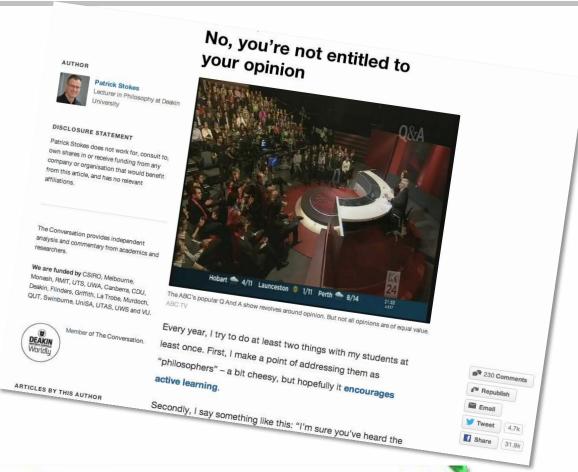






Case studies: Viral international pickup

- 250Kviews, 32Kon facebook
- Most widely-read article
- Re-tweeted by: Ric hard Dawkins, Ric ky Gervais, Tim Minc hin & others





Richard Dawkins @Richard Dawkins

No you're not entitled to your opinion. Or you're not entitled to have it taken seriously unless you have evidence. bit.ly/OaLtxl

Expand

Seeding mainstream media

43% of our authors have received media requests as a result of writing for The Conversation (Source: 2012 Annual Survey)



"The Conversation is the next generation of crowd-sourcing – betterfocus, bettercrowd! I have done two radio interviews, from Brisbane and WA on the back of stuff! ve published. If the University is looking for opportunities for exposure, this is up there."

-James AJ He athers, PhD c and id ate, University of Sydney



"Thanks very much for publicity in The Conversation, it led to 5 interviews ye sterday. Idid two interviews with ABC that arose from the piece and was interviewed for Channel 10 and for The Age."

- Clive Phillips, Professor, Schoolof Animal Welfare and Ethics, UQ



"The last piece went quite well* and Ihope this one doesn't go quite as well, as Ihave some marking to do."

- John Hadley, Research Lecturer, University of Western Sydney

* More than 25 media outlets picked up Hadley's April 12 article on biodiversity loss

Every authorgets a rich control centre



- Catherine Fowler, a Professor from the University of Technology in Sydney, gave a talk about raising infants
- It included a video of what a child would experience in a shopping mall in a forward facing pram
- Told a journalist about herre search



Inward-facing prams cost "10 times more"
Outward-facing prams "terrifying"
"More important they are loved, fed"

PARENTS who push their children in outward-facing prams are cruel and selfish, a leading Australian child health academic says.

But the controversial claims, made by Professor Cathrine Fowler from the University of Technology Sydney, have been shot down by the country's best-known midwife, *Baby Love* author Robin Barker.

Ms Barker says, as long as babies are loved and fed, the direction they face when in a pram is irrelevant.

Professor Fowler, who will give a lecture on raising babies at UTS on Tuesday, said strollers that point children in the direction of travel are isolating, stressful and terrifying.

"Imagine if you were strapped to someone's chest with your legs and arms flailing, heading with no control, in a busy shopping centre. It would be terrifying. It is the same for our children," Professor Fowler, a mother of two, said.

- "Iemphasised the need to be sensitive with the story as my intent was not to make parents feelguilty."
- "Much of what I had said was taken out of context."
- "Ifelt that I'd been set-up by the journalist."

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

Hot Topics On the brain Cycling in Australia Sovereign debt Explainer Academic journal debate Australia in Asia Sharks More...

25 August 2011, 6.35am AEST

Misquoted: how an innocent interview about raising babies led to hate mail

AUTHOR



Cathrine Fowler

Professor & Tresillian Chair in Child & Family Health, Faculty of Nursing, Midwifery & Health at University of Technology, Sydney

DISCLOSURE STATEMENT

Cathrine Fowler receives funding from the ARC.

The University of Technology, Sydney is a Founding Partner of The Conversation.

Our goal is to ensure the content is not compromised in any



TAGS

Childhood development

• Journalists have an agenda

• But a cade mics can't withdraw – the y've a vital role in informing public discussion

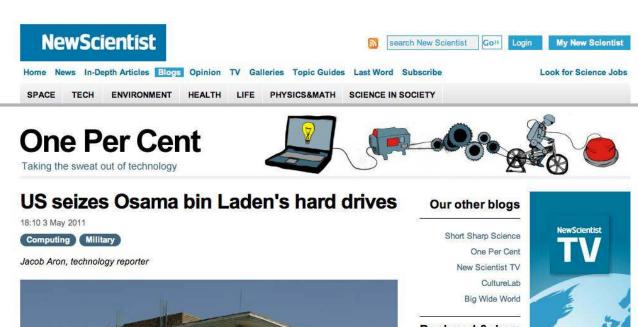
• The Conversation aims to provide a solution via a safe publishing environment

The new media ecosystem – The Conversation

- Heardirectly from real experts on issues of the day
- Use the Conversation to dip your toe in the water and build profile
- Safe publishing environment
- Arguments based on evidence
- Engagement

Story se le c tion

What secrets lie inside? (Image: KeystoneUSA-ZUMA/Rex Features)



One Per Cent
New Scientist TV
CultureLab
Big Wide World

Bookmark&share

turn on
tune in
explore
welcome to
New Scientist TV

Categories

Aerospace
Apple
Apps
Augmented reality

- Saw story online
- "What will the US government do with the hard drives?"
- "If they are encrypted, what then?"
- Let's find an encryption expert

Tracking down an expert

- Consult our expert database
- Google search (e.g. "encryption university Australia")
- Contact university media offices

Pro f. Je nnife r Se b e rry – Unive rsity o f Wo llo ng o ng



- Been working in computer security for 30 years
- Involved at design stage of AES-256 encryption scheme (which bin Laden may have utilised)

Making contact

- Initial phone call to Prof. Seberry to discuss the story idea
- Agreed to write a story for us by the following morning
- Wrote hera "brief" ...

Briefing the expert

Hi Jennifer,

Thanks again for having a chat just now. I appreciate your time and interest in helping out with this piece.

As I mentioned, the site I work for is called The Conversation (http://theconversation.edu.au) and we're a new online publication working with the research sector to foster a more informed public debate.

In the Science/Tech section we're looking at the news that the US has seized Osama bin Laden's hard drives (http://www.newscientist.com/blogs/onepercent/2011/05/us-seizes-osama-bin-ladens-har.html), trying to put the news into a bit of context for our readers and explaining the difficulty of decrypting data encrypted with the AES-256 encryption scheme.

As I mentioned, we'd be looking for something quite short (~400 words) written quite conversationally and even off the top of your head. Our audience is a general, interested and reasonably well educated one, but without any specific training in computer science.

Here's what it would be great for the piece to touch on:

- What the AES-256 encryption is and where it's come from
- · Why it's impossible to crack
- Why rumours of "backdoor" decryption methods are completely ridiculous

Ideally, from our point of view, we'd be looking for as quick a turnaround on this piece as possible so if you could get back to me ASAP (either way) that would be great, just so that I can track down someone else if you can't write the piece for us.

Thanks again for your time Jennifer and I hope to speak with you again soon.

Regards,

Matt de Neef Assistant Section Editor, The Conversation "This is what we'd like from the piece"

The next moming ...

Jennifergot back to us at 10.50am the following morning with a (very) short piece:

It has been reported that Osama bib Laden's hard drives have been seized.

These are said to be encrypted with AES256. What is that?

The US Department of Commerce in 1997 called for cryptologists around the world to submit candidates for the Advanced Encrytion Standard (AES).

Our research group submitted an entry, LOKI, but it was quickly removed from contention in the open, world wide competition that ensued.

There were a number of international conferences and the final winner was chosen by the cryptographic world community. The winner was Rjindael, invented by two Belgian cryptologists, Joan Daemon and Vincent Rijmen.

Since so many experts have analysed, taught the algorithm and because of the openness of the process to choose the AES standard I do not believee ther aree any "backdoors". The only way I see to break the encryption is to use a complete search on hundreds of thousands of specially built machines. This I believe is not feasible.

159 words! 😊

Abit more ...?

• We were looking formore than 150 words, so:

It has been reported that Osama bib Laden's hard drives have been seized, hard drives that could conceivably contain ...

These are said to be encrypted with AES256. What is that? (Can you put this into context for us – roughly speaking, how does encryption work and how does this particular scheme work? How much better than the competition is it? Who uses it? Eq. US government, banks, Wikileaks?)

(Can you spell out that this code is uncrackable and explain why? Will this be the case even in the future, as technology improves?)

The US Department of Commerce in 1997 called for cryptologists around the world to submit candidates for the Advanced Encrytion Standard (AES). In my capacity as ... I was part of a research group that submitted an entry, LOKI (Can you touch on what this is?), but it was quickly removed from contention in the open, world wide competition that ensued. (Why was your entry removed from the competition?)

There were a number of international conferences and the final winner was chosen (when was this?) by the cryptographic world community. The winner was Rjindael (Is this the name of the algorithm that AES uses? It would be great if you could explain this a little further), invented by two Belgian cryptologists, Joan Daemon and Vincent Rijmen. (Which went on to AES256????)

There have been suggestions that the US government was involved in the creation of this encryption scheme, and engineering a 'backdoor', allowing them to decrypt any data encrypted using this method.

I personally don't believe such a "backdoor" exists for the following reasons:

Text in red = "please give us more information!"

Since so many experts have analysed, taught the algorithm and because of the openness of the process to choose the AES standard I do not believe ther aree any "backdoors".

The only way I see to break the encryption is to use a complete search (Can you spell out what this is and what it would involve?) on hundreds of thousands of specially built machines. (Do such machines exist and if so, how long would it take, theoretically, given the potential value of the information in this case? Is it likely that resources would be pushed in this direction?)

This I believe is not feasible.

3.

(We need something to finish such as... What does this mean for the information on bin Laden's hard drives? In fact, what might this information be? We may never know?)

At 12.50pm Jennifersent through a revised version incorporating our suggestions:

It has been reported that Osama bin Laden's hard drives have been seized, hard drives that could conceivably contain information regarding the membership, funding and future plans of El Quaeda. Knowledge of this information would enormously help anti terrorism.

These hard drives are said to be encrypted with AES256. The AES is the current world "Advanced Data Standard".

Computer encryption works by taking data in binary form, that is written with ones and zeros, i.e.bits, breaking it into blocks of length 256 bits and then inputting in into an algorithm, which is like a black box, which causes as much confusion as possible using a "secret key" which is also 256 bits of binary data. Knowing this key means that the data can be unencrypted and so returned to it's original form. That is why it is kept secret. Data encryption using the AES is ubiquitous. It is used by banks, business, governments, and on your own computer to protect network links.

A look at the animated version of how the AES algorithm works written by Enrique Zabala from Paragray

thttp://www.cs.bc.edu/~straubin/cs381-05/blockciphers/rijndael_ingles2004.swf or

http://blog.ultrassecreto.com/wp-content/uploads/2009/06/projetofinal.html

gives an idea of the complication of the AES encryption process.

The US Department of Commerce in 1997 called for cryptologists around the world to submit candidates for the Advanced Encrytion Standard (AES). As Director of the Centre for Computer Security Research at the University of Wollongong, I was part of a research group that submitted an entry, LOKI, a symmetric encryption algorithm based on our research. LOKI was quickly removed from contention in the open, world wide competition that ensued as other researchers found ways to make it easier to decrypt than AES.

Part of the five year standardization process included a number of international conferences, many research articles and computer testing by international researchers. The final winner was chosen by the cryptographic world community and announced by the US Government as its Federal standard on 26th May 2002. The winner was a symmetric encryption algorithm called Rjindael invented by two Belgian cryptologists whose native language is Flemish, Joan Daemon and Vincent Rijmen. The name Rjindal was chosen as a combination of the authors' names as a gentle poke at the fact that no one can pronoune names in Flemish (the other Belgian national languages is French). It was the Rjinael version that uses 256 bits that is the Advanced Encryption Standard (AES256) used today.

There have been suggestions that the US government was involved in the creation of this encryption scheme, and engineering a 'backdoor', allowing them to decrypt any data encrypted using this method.

I personally don't believe such a "backdoor" exists for the following reasons:

- 1. the open process by which candidates were submitted and analysed by the world cryptographic community;
- 2. The fact that it has been widely accepted by all other governments (and apparently bin Laden)
- The process used in the encryption process which is both "state or the art" and "best practice".

The only way I see to break the encryption is to use a complete search, that is to try all possible keys, on hundreds of thousands of specially built machines. Such machines do not exist and if they did they would take many, many times the length of time this universe will exist to carry out such a search. This I believe is not feasible.

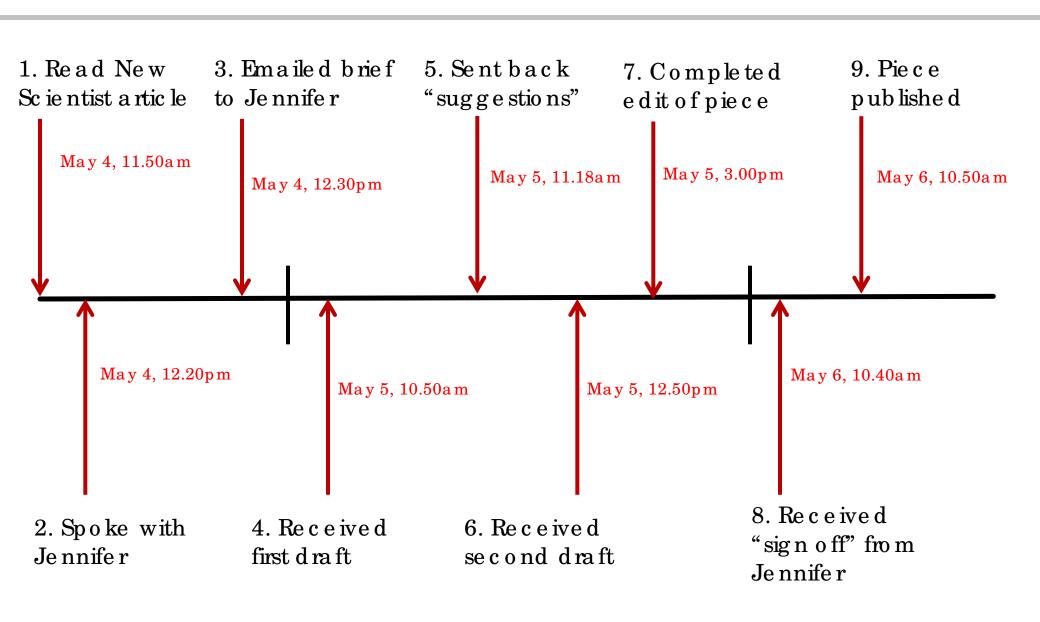
This means we will not be able to crack thee encryption algorithm or find the key used by bin Laden. So we will have to rely on other kinds of information to find out El Quaeda's future plans

598 words ©

The ball's back in our court ...

- Spent some time editing the piece
- Sent it back to her for final sign off

Public ation time line



Here's one Iprepared earlier...

Published: May 6, 2011

Cracking bin Laden's computer code: unlikely

AUTHOR



Jennifer Seberry

Professor of Computer Security at University of Wollongong

DISCLOSURE STATEMENT

Jennifer Seberry receives funding from the ARC.

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Recovering information from Osama's hard drives may be impossible, wokktr/Flick!

It has been reported that Osama bin Laden's hard drives have been seized, hard drives that could conceivably contain information regarding the membership, funding and future plans of al-Qaeda.

Information of this type would help anti-terrorism agencies enormously.

The hard drives were recovered from bin Laden's compound in the Pakistani city of Abbottabad and are said to be encrypted with a encryption method known as AES-256.

AES-256 is the current world standard for data encryption and is used by the likes of Wikileaks and the US Government to encrypt sensitive information.

RELATED ARTICLES

The death of bin Laden doesn't mean the terror threat is over

Frustration to salvation: a code to end computer crashes

Why assassination seems to be the hardest word

Killing Osama: the exception that proves the rule

Eichmann was tried in Jerusalem – bin Laden should've faced court too

TAGS

Osama bin Laden

Why engage? Because it will help you

- Join the public conversation
- Raise your profile
- Raises profile for your dept, univ
- Helps raise research funds
- Can attract students
- Can lead to speaker/confinvitations
- Can lead to consultancy work
- Opens up possibility of new collaboration

* Academic writing opportunities

- * Public feedback * Student
 collaboration/criticalanalysis * Potential
 students
- $*Real-world\ outcomes*Peercomment$
 - * Industry contact * Media comment

18 articles

45k readers

* Speaking invitations *]

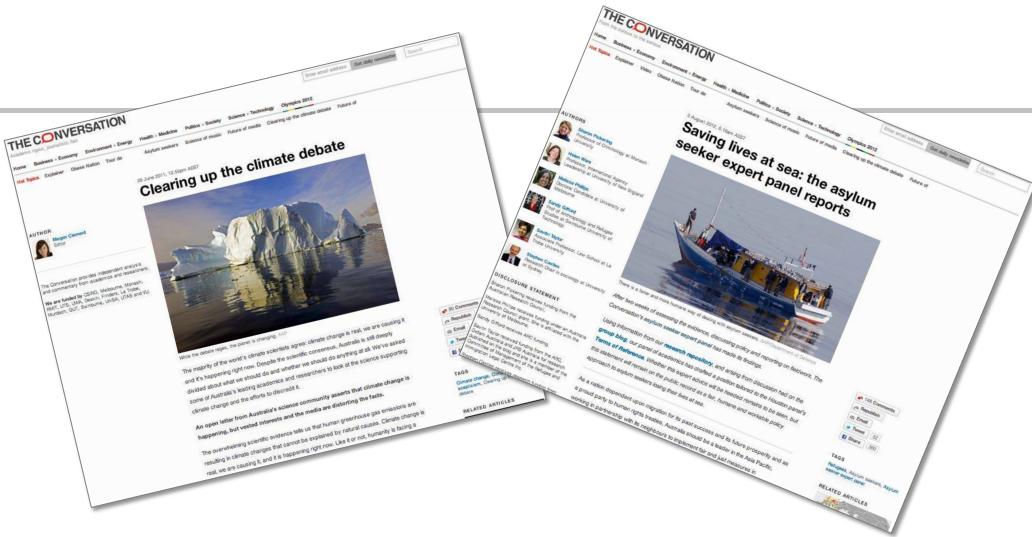


Dr. Se an Rinte l

Le c ture r in Strate g ic Communic ation

Sc hool of Journalism & Communic ation

The University of Que ensland



Climate Change

- 350+ artic les, including:
 - 14-part series on the real "debate"
 - Monc kton Watch
 - 1,000s of comments

Asylum Seekers

- Expert panel
- Re se a rc h re p o sito ry
- Data visua lisation of refugees flows
- Findings tailored to Houston Panel

If, as a society, we value academic engagement, then how do we recognise and reward it?

Why Engage: The triple helix, be warned!

- Government funders want value for money
- Already measuring teaching and research
- Will measure engagement or "impact"
- A consideration in funding
- UK and US are already measuring
- Go 8 and ATN univs working new measures

Get involved!

- Create a profile
- Pitch to oureditors



