



Education & Public Outreach in Radio Astronomy with the SKA South Africa

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What is outreach ?

An activity of providing services to any population who **might not** otherwise have access to those services



Spacewalk to fix Hubble Space Telescope



“For most science news to get printed these days it has to involve big bang, big bucks, big screw-up, or big comeback—and with Hubble you’ve got them all.”¹ A writer for the New York Times



- Smile FM
 - Sensitize the population about water issues around Western Cape
 - Water warriors (name selected by public)
 - Facebook group – over 30k followers within a month
 - Primary School visit
 - Car stickers – General public
 - Grey water system, competition
 - Water consumption reduced from over 850 ML to just above 750 ML

OUT-REACH / IN-REACH

- **share** our research and let us discuss scientific issues with you
- **connect** the public to the fun and excitement of science at a leading research university
- **cultivate** an interest and appreciation of science
- shows how the research-intensive university **contributes** to society
- makes science education **accessible** and **interactive** for students, teachers, and the community

Outreach

- **Disseminates** our scientific expertise to a wider community
- **Contribute** to create awareness about astronomy in general, and the SKA Africa in particular
- **Excite** young people Science Technology Engineering & Mathematics (STEM)
 - Exhibitions
 - Careers fairs
 - Science festivals
 - Relevant competitions
 - Public talks

REACH

THE HARD TO REACH ?

WHY

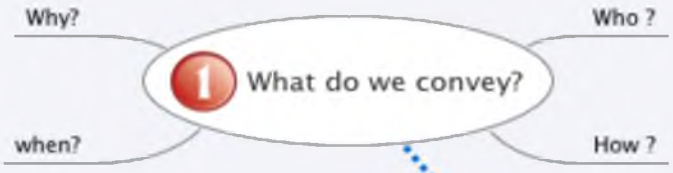
WHO

WHEN

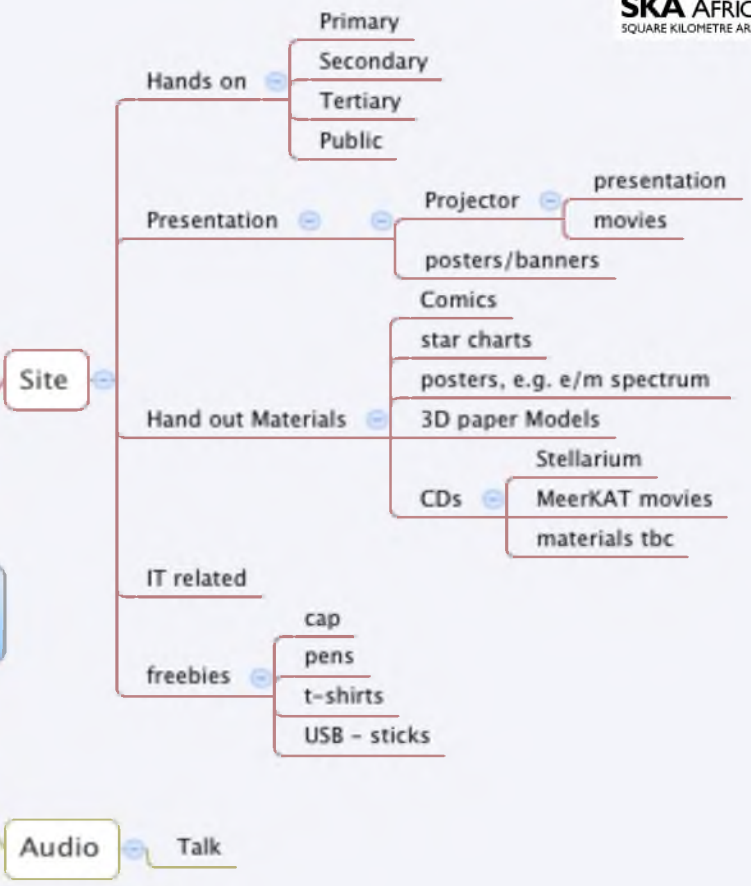
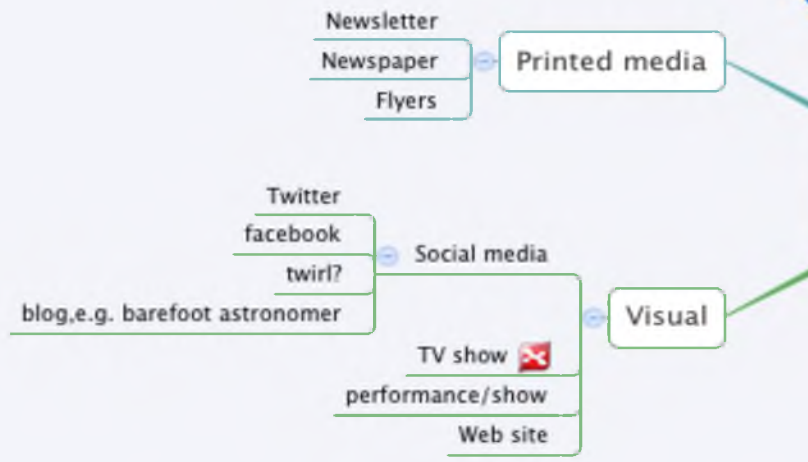
WHERE

HOW

WHY?



Outreach





"If I have seen further, it is by standing on the shoulders of giants" ... Isaac Newton

- Most evolutionary advantage humans possess is the ability to communicate.
- Transgressions can occur !!!
- SKA bid - Australia/Africa
 - Respect
 - Political issues
 - Scientist work together
- Religious belief
- Culture
- Inadvertent publicity !!!
 - Do we do publicity?

EXPERIENCE IT



IMPROVISE



INVOLVE/PLAY



SATISFACTION



UNDERGRAD TRAINING



TRAINING



SciFest





"ALTERNATE" OUTREACH



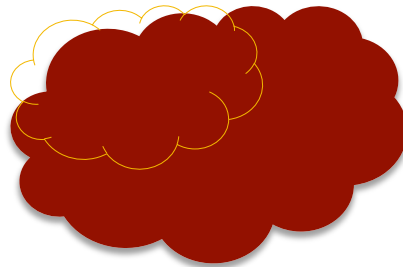


OUTREACH BEYOND BORDERS



OUTRAGEOUS OUTREACH

Among the flood of information and noise, unconventional outreach is necessary also to position an organisation as “a thought leader” (Weinberg, 2009)



- How do we make sure that people know that we exist?
- How do we make sure that people receive relevant and timely results?
- How do we get people to like us?

(Oana Sandu – CAP, 2011, Vol 11)



EA ESTE ASTRONOM

+++



Foto: Alex Conu pentru Băneasa Shopping City



Image credit: CAP Journal, 2011, vol 11

DANCE



your PhD

TED TALKS



IDEAS WORTH SPREADING



Credit: Pedro Russo (UNAWA), CAP, Chandra

UNCONVENTIONAL OUTREACH



Credit: Google images

SAAO: Ferrari visit



Credit: SAAO

Science Communication

- Mass media
 - Radio talk show
 - TV shows
 - Women week
- FameLab
- Faces of Africa - CCTV
 - <https://www.youtube.com/watch?v=AnB1U1K4OVM>
- StarBiz
- **Head: Communication & Stakeholder Relations - Iraynard@ska.ac.za**



CHECK LIST

- Planning
- Budgeting
 - everything
- Testing
- Recording
- Communicating
- Reporting



THE SCIENCE NEWS CYCLE

JORGE CHAM © 2009

Start Here

Your Research
Conclusion: A is correlated with B ($p=0.56$), given C, assuming D and under E conditions.



...is translated by...

UNIVERSITY PR OFFICE
(YES, YOU HAVE ONE)
FOR IMMEDIATE RELEASE:
SCIENTISTS FIND POTENTIAL LINK BETWEEN A AND B (UNDER CERTAIN CONDITIONS).



...which is then picked up by...

NEWS WIRE ORGANIZATIONS
A CAUSES B, SAY SCIENTISTS.



...who are read by ...

THE INTERNETS

Scientists out to kill us again.
POSTED BY RANDOM DUDE
Comments (377)
OMG! i kneeww ittl!
WTH???????



...then noticed by...

We saw it on a Blog!
A causes B all the time
What will this mean for Obama?
BREAKING NEWS BREAKING NEWS BREA

CNC Cable NEWS



...and caught on ...

4 LOCAL EYEWITLESS NEWS

WHAT YOU DON'T KNOW ABOUT "A"... CAN KILL YOU! MORE AT 11...
A: KILLER AMONG US??
LOCAL EYEWITLESS NEWS

...eventually making it to...

YOUR GRANDMA



Reporting

- Context, visualization
- Relate to audience
- Simplify term
- Lose the jargon
- Define all unfamiliar terms
- Minimize acronym
- News – agreement
- Get



CONCLUSION

- Sharing of ideas and concept without boundaries has enabled scientists to make significant progress.
- Our future depends on everyone
- Who can prepare the future generation better if not us !!!



THANK YOU

facebook



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