Being a successful academic researcher

by

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Success as an academic researcher

• Two sets of requirements are necessary
• Intellectual and operational
  • Intellectual requirement is about understanding and being able to use the language and the concepts of research methodology
  • Operational is more about have the right mind set to act as an academic researcher.
• This presentation is about the latter
Research as the new kid on the block

• The importance placed on research today is relatively new to the University.

• The European model of the University is now some 900 years old and although there were from time to time activities which resembled scientific research most of this period universities were devoted to teaching established knowledge to prepare small numbers of highly privileged individuals for the established professions.

• Science was mostly pushed forward by independent gentlemen scientists. The first scientific journal in the UK was the Philosophical Transactions 1665.

• It was the demand for knowledge stimulated by the industrial revolution which drove the development of University research and led to the development of the PhD in Germany in the early part of the 19th century.
The first half of the 20\textsuperscript{th} century

- It took a while for the PhD to appear in the English-speaking world with its first being introduced to the USA and then eventually to the United Kingdom.

- However, the PhD was in the early part of the 20\textsuperscript{th} century perceived more as a licence to teach at a university than a rigorous exercise in adding something of value to the body of knowledge.

- Although the clarion call “Publish or Perish” is said to have appeared in an academic context in 1942 it was not regarded as an imperative until several decades later.
Why is “Publish or Perish” a central tenant of academe?

• There is considerable speculation as to why “Publish or Perish” is a central tenant of academe one of the most credible of which is the hypothesis that it is easier to measure research output down to measure the quality of teaching.

• This is not been adequately tested

• First of all it is important to notice that the emphasis has changed from researching to publishing.

• The best researcher is of no value to an academic career unless it is published and today universities are increasingly particular about where the research is published............ P  R  A  T
Academic journals

• It is difficult to estimate the number of academic journals (28,000 estimated in 2014) but it is clear that the number of research papers seeking publication every year is enormous (2.2 m estimated in 2016) and continues to grow

• The academic environment has been complicated by the appearance of what is now regularly referred to as the Predatory Journal which is generally defined as the journal which takes an academics money and provides none of the benefits which it promises

• However, Predatory Journal are relatively easy to spot and should be avoided at all costs. Open access does not mean predatory. Beall's List of 'predatory' journals. Dr Fox in the 1960s and Alan Sokal 1996
The research culture

• It is extremely difficult to be a high-output academic researcher on one’s own. High-output academic researchers are normally located in a university department which should constitute a community in which there is a vibrant research culture.

• Of course with the internet and web you can create a virtual community.

• The research culture is a primary motivator but it has to be supported by adequate resources and these working together produces great results.

• In understanding the research culture it is important to look at the values which drive successful research and these include:-
Knowledge was created as a result of science and thus what are the characteristics of scientific enquiry?

• Starts with a research question
• It respects what has been previously learnt
• Structured................methodology
• Sceptical....................takes nothing at face value
• Seeks alternative explanations
• Looks for application of the findings
• Is self aware of its limitations
Values of academic research

• The importance of knowledge itself both from the point of view of creating new knowledge and recognising the established body of knowledge
• The importance of scepticism
• The importance of openness – the story of Fermat Last Theorem
  https://www.youtube.com/watch?v=6ymTZEeTjI8
• The importance of sharing – but no taking advantage
• The importance of encouraging – the whole enterprise of students
• The importance of persevering – get it right first time is often a myth
• The importance of fairness
• The need to see it applied or put to use varies from subject to subject.
Be clear about

• What we consider as knowledge
• We believe that for which we have evidence
• Beware ideas do get stolen
• Encouragement can be a sizable commitment
• Perseverance is only laudable if the objective is eventually reached
• There is a place in the universe for pure research
• Being fair to students and colleagues
• There is no mention of ethics or integrity
Traits & Skills of the successful researcher

• Curiosity
• An awareness of the multi-dimensional nature of research problems
• Slowness to judgement
• Achievement orientated
• Preparedness to devote time
• Thick skinnedness
• A propensity to write things down
• Clarity in expression
• Seek collaborations (at least in early career) and networks
• Being a good project manager
• Self confidence
Get these issue right

• Curiosity.............very few issues in any aspect of our knowledge have been extensively resolved, so there are many opportunities for research

• An awareness of the multi-dimensional nature of research problems .....the context of research problems is important and thus gives rise to interdisciplinary research

• Slowness to judgement.................what appears to be obvious may not be the case

• Achievement orientated .................get some result for your efforts
Get these issue right

- Preparedness to devote time .................... A quick piece of research may not produce much for the effort expended.
- Thick skinnedness ............................ Ignore gratuitous criticism
- A propensity to write things down ............... write anything you think might be of interest now or later
- Clarity in expression ....................... Learn to present
- Seek collaborations (at least in early career) and networks ........ when starting out try not to go it alone
- Being a good project manager ..... Research is essentially a project
- Self confidence ...................... If you don’t believe in yourself then no one else will
Techniques

• Is curiosity a “born with” trait or can it be developed?
• Scepticism can be developed by asking the question What evidence is there for ......................... ?”
• Is curiosity the same as critical thinking?
  • https://www.youtube.com/watch?v=lyiGFPI6z6g
  • https://www.youtube.com/watch?v=FRiEJIbTDo
  • https://www.youtube.com/watch?v=xZJwMYeE9Ak
• Nature of research problems
  • https://www.youtube.com/watch?v=d3mwAK_Il1E
• Slowness to judgement
  • https://www.youtube.com/watch?v=Ny8IdiRagl4
Using the Internet and the Web

• A question which I sometimes hear today is “How did you ever manage to do any research without the Internet and the Web?” ............... The answer to this question is “With difficulty!”

• The list of opportunities offer through these tools is enormous. Everyone will have their own preferences.
THE SOCIAL PLATFORM UNIVERSE
THE LEADING PLATFORMS FOR ACADEMICS

Platform to 'EXPRESS'
https://www.researchgate.net

Platforms to 'SHARE'
https://www.academia.edu
Blogs, Twitter (Microblog)

Platforms to 'NETWORK'
https://www.linkedin.com
https://www.xing.com

Individualised Emails to ask for articles
Administration of research

• Universities have various requirements including ethics protocols
  • No harm should come to anyone as a result of the research
  • The university’s name should not be brought into disrepute

• Complying with ethics protocols does not imply anything about the integrity or the research or the researcher.
Conclusion

• Being recognised as a successful academic researcher will bring much satisfaction as well as a lot of opportunities.