Effective and Enjoyable Research

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Abstract
Research is useful, fascinating, and challenging to do effectively. This tutorial is designed to help people get more effectiveness and personal satisfaction out of their research and their research careers.
Elsewhere people can learn how they have to do research (e.g., to use the right methods, to write to professional standards), but creativity, innovation and enjoyment often seem optional, if not irrelevant, and never get priority. Indeed far too many people think you can do, and even should do research without having fun! Such people are totally wrong, and miss out everything.

Keywords
Research, Science, Ethics, Fun

1. Introduction
There is boring research, and there is exciting research.
Research requires diverse skills in qualitative, quantitative, and analytical thinking. But is also requires attitude — to balance creativity with focus; to balance personal enthusiasm and commitment for objectivity; to balance work with publication; and to balance a vision for the future with realism about the present.
Research is simultaneously to understand and to change the world. Research does “good science,” in some sense of the word “science,” doing experiments, disseminating them, being replicable, and formulating theories and visions that others can use — and, of course, presenting and publishing the results.
Good research has to be recognised, and maybe even celebrated, by the community. Researchers have to be networked together, and yet recognise each other’s diversity and alternative approaches.
Researchers, particularly those in areas that Herbert Simon called artificial sciences, can change their object of study, propose innovative solutions, and even create new research subfields. Mostly, though, there is a continual catch-up to be played with the commercial developments, which does not aim to progress core science values.
The researcher’s personal degree of involvement with their work is at once a source of inspiration and commitment, as well as a source of bias. What is the borderline between research and, say, a product review? Can we do research on our favourite thing without unhealthy bias? Should we apply the research standards of medical researchers in everything we do (e.g., clear auditing)? What do we do when we encounter fraud — and is it fraud when it is inspiring?

This implies that the foundations and methods of research, including ethics, are themselves objects of research and debate. Put another way, how should we do good research? Then, in the context of the tutorial, how do we put our conception of quality into action to make our own research more effective?

2. Problems to Overcome
Academic researchers have problems in addition to the usual ones of writing up: RAE pressures, career progression, dependent researchers, and so on. Young researchers also have careers to balance: the final year of any research contract may be better spent looking for another job rather than doing research — how do you balance job seeking with research activity? (You could give a seminar tour.)

How do we find the time? How do we make progress sufficiently fast to be doing work that is still respectable when we’ve finally finished it? How do we keep up to date? How do we get better?

3. Presentation Methods
Participants will develop their own “book of research” for later use, by drawing on the interactive presentations and group work. Pair working will be facilitated. Role-playing exercises will be used. Plenary sessions will be used to share experience and to provide or share guidance on specific problems.

4. Participants
People at all levels of postgraduate research experience will be welcome: people starting PhDs (whether full or part time, whether as students or as staff) … to Departmental or University Research Directors. However the tutorial will be of particular interest to research leaders, including for those in new departments that are struggling to get research going in difficult environments, typically working under high teaching loads.

It is recommended that participants bring examples of their own current activities: proposals, papers, referees’ comments, etc.

5. Outcomes
The tutorial covers ways of doing and enjoying research, whether for the love of it or for satisfying managerial RAE-type of criteria.
This tutorial is designed to help people get more fun, success and satisfaction out of their own research, and to achieve their goals in an increasingly pressurised world.

The planned outcomes include:

1. Excitement
2. Commitment to personal research goals
3. Effective strategies to achieve personal research goals
4. Improved research networking
5. Participation in national research initiatives
6. Appreciation of the diversity of approaches
7. Knowing a toolbox of techniques such as nibbling, memorial boxes, etc.
8. Greater ability to support other researchers

6. ABOUT THE PRESENTER

Harold Thimbleby is Director of UCLIC, the UCL Interaction Centre, a multidisciplinary centre in the UCL Departments of Psychology and Computer Science (see www.uclic.ucl.ac.uk). He was recently the keynote speaker at the “Next Generation Tour,” a research workshop that toured New Zealand Universities, inspiring undergraduates to take up research.

He is a Royal Society-Wolfson Research Merit Award Holder. He was awarded the BCS Wilkes Medal. As Gresham Professor of Geometry, Harold gives regular public lectures and school lectures.

Harold was previously Research Director in the Faculty of Technology and in the School of Computer Science at Middlesex University, one of the largest computing departments in the UK. He has worked in five UK universities, and has held visiting positions at overseas universities and an industrial laboratory. He is a member of the EPSRC College, on five journal editorial boards and has been on numerous conference committees.

He published his first paper, on menu selection, in 1978, and has since written over 350 refereed papers and articles in many forms — from newspapers to Encyclopedia Britannica — and is currently writing his fifth book, to be published by MIT Press.

7. SOME BACKGROUND READING...

What are your favourite references? Who is your research hero? If you haven’t got favourites or heroes, why not?

Have you read any biographies — Marie Curie, Dick Feynman, Benjamin Franklin, Karl Popper — that inspire you?