Web resources of interest to those teaching quantitative research methods /data analysis, at undergraduate level to social science students.

This is a list of internet resources that you may find helpful, or which contain resources that might be of general interest. It is far from complete and I would welcome suggestions for additions. Please email useful sites etc to john.macinnes@ed.ac.uk and I'll post updates to the methods teachers mailing list.

ESDS NESSTAR Catalogue of teaching datasets

This provides direct access via NESSTAR to data in around a dozen UK government datasets simplified to be 'user-friendly' for those learning about data analysis.

http://nesstar.esds.ac.uk/webview/

ESDS guides:

A list of web resources:

http://www.esds.ac.uk/resources/teaching.asp

A guide to ESDS based learning and teaching material:

http://www.esds.ac.uk/findingdata/learning.asp

ESDS International

Countries and Citizens: Linking International Macro and Micro Data

'Countries and Citizens: Linking international macro and micro data' is an interactive training resource with online tutorials, activities, study guides and videos, designed to show how to combine socio-economic data from country-level aggregate databanks (macro data) with individual-level survey datasets (micro data).

It comprises five units, each of which was written by a subject specialist and has been designed as a self guided learning resource. Though specifically for postgraduates and researchers, it may also be of interest to undergraduates.

http://www.esds.ac.uk/international/elearning/limmd/

ESDS UN Millennium Development Goals e-learning materials

These e-learning materials have been designed to help learners explore the United Nation (UN) Millennium Development Goals (MDGs). In addition they will guide participants through using the international data service ESDS International and provide learners with an increased understanding of the data available at ESDS International and the potential of that data for use in their own research or teaching.

http://www.esds.ac.uk/International/elearning/unmdg/index.asp

Census Dissemination Unit Learning and Teaching material

http://cdu.mimas.ac.uk/landt/index.htm

see also ESRC Census programme homepage

http://census.ac.uk/

European Social Survey Education Net

ESS EduNet is a training resource mainly developed for use in higher education. The ambition is to create a social science laboratory where theoretical questions can be explored using high quality empirical data. The resource is based on the European Social Survey.

http://essedunet.nsd.uib.no/cms/edunet/about.html

ICPSR Online Learning Center

An extensive suite of teaching tools and resources under 'Data drive Learning Guides'

http://www.icpsr.umich.edu/OLC/index.html

National Numeracy network homepage (U.S.)

http://serc.carleton.edu/nnn/resources/index.html

Teaching materials

http://serc.carleton.edu/nnn/teaching/index.html

Statistical Literacy website

"Goal: To develop Statistical Literacy as an interdisciplinary curriculum in the liberal arts" U.S. project dedicated to improving the standards of use, presentation and analysis of statistics and numerical data.

http://www.statlit.org/

National Numeracy network homepage (U.S.)

http://serc.carleton.edu/nnn/resources/index.html

Teaching materials

http://serc.carleton.edu/nnn/teaching/index.html

Google 'Public Data' project

In its infancy, and so far hosting only US data, this project aims to make easily 'clickable' and editable graphics of official US statistics.

Case Study of The Politics QDA course at Sheffield, which won Dr Sean Carey the PSA's Bernard Crick prize:, and the course website:

http://www.good.group.shef.ac.uk/wiki/index.php/Context_and_Quants:_How_and_why_Politics_structured_data_analysis_into_the_curriculum

http://www.shef.ac.uk/politics/methods/

Online QM / statistics courses

Many universities in the UK and US have material posted online. It is wise to check with the original author or project for permission to re-use material.

University of the West of England(Bristol) online quantitative and qualitative data analysis course:

http://hsc.uwe.ac.uk/dataanalysis/

Thames Valley University guide to dissertations which gives overview of research process including collection and analysis of quantitative data:

http://brent.tvu.ac.uk/dissguide/hm1u0/hm1u0fra.htm

DISCUS 'Discovering Important Statistical Concepts Using Spreadsheets' from the Faculty of Engineering and Computing at Coventry

http://www.coventry.ac.uk/ec/research/discus/discus_home.html

A short web course by Cornell professor(that acts as a promotion for a fuller paid-for version) which is free to access but not mirror or copy:

http://www.socialresearchmethods.net/kb/

A complete research methods and statistic course, aimed at psychology students:

http://www.une.edu.au/WebStat/unit_materials/index.htm

Statsoft Electronic Textbook bills itself as "The only Internet Resource about Statistics Recommended by Encyclopedia Britannica"

http://www.statsoft.com/textbook/

BBC Radio 4 series on numbers 'More or Less'

http://news.bbc.co.uk/2/hi/programmes/more_or_less/default.stm

US Government Accountability Office introduction to quantitative data analysis

(Clear, authoritative, concise and very dry)

http://www.gao.gov/products/PEMD-10.1.11

Online survey tools

These can be useful in learning and teaching on questionnaire design.

http://www.survey.bris.ac.uk/

http://www.surveymonkey.com/

Youtube

has a surprising and steadily expanding amount of material. Simply enter different statistical terms in the search function. The results are mostly from the US and of extremely variable quality. Daniel Judge, a lecturer in statistics at East Los Angeles College has uploaded and entire set of statistics lectures in 10 minute chunks. His homepage has links to video streams reviewing some simple stats exercises:

http://web.mac.com/ddjudge/ddjudge/Main_Page.html

You can encourage recalcitrant students by threatening to play them the following cult rap video (much imitated but never surpassed):

http://www.youtube.com/watch?v=JS9GmU5hr5w

Mean, median and mode are explained in many different ways, including this toe curler:

http://www.youtube.com/watch?v=Z7hM-xC_lic

or the more straightforward

http://www.youtube.com/watch?v=g4vbXvoQWf0&feature=related

Students might enjoy meeting 'Standard Deviation Man' (then again…)

http://www.youtube.com/watch?v=cLTSenQotqw