

# Data-driven learning and teaching



# Real data bring learning to life

Using real-world data in teaching is an invaluable way for learners to confront complex social research questions.

Data from the UK Data Service:

- are well documented, enabling students to critically engage with real-world surveys and statistics
- provide rewarding raw material to teach data analysis
- can be used to enrich substantive teaching with historical and up-to-date evidence that can be interrogated.

We can help you access and use all types of data:

- quantitative and qualitative
- UK, international and cross-national
- longitudinal and cross-sectional
- in raw and summary forms.

Our large collection is diverse, encompassing time series, longitudinal surveys, historical and contemporary censuses, and interviews from classic and contemporary studies.

### Datasets made for teaching

Most of our data are available for teaching purposes. To help get students started, we also produce cut-down versions which make them easier for learners to use.

The UK Data Service also has a small but growing number of open data collections which can be accessed without registration, for example:

- 2011 and 2001 Census aggregate statistics
- teaching dataset from the Well-Being Module of the 2015 ONS Opinions Survey
- World Bank global development indicators
- teaching resources including data on interview and noninterview methods.

You can browse and download all teaching datasets from our website.

See:

ukdataservice.ac.uk/use-data/ teaching

# Types of data in our collection

Our collection includes data used by policymakers and often reported in the news:

- census data are used in national planning and resource allocation
- the Crime Survey for England and Wales is used to estimate the extent of crime experienced by people
- World Development Indicators, made available by the World Bank, contain statistical data for over 900 development indicators covering more than 200 economies.

Our collection includes key datasets produced by, and for, social scientists, for example:

Understanding Society is funded by the Economic and Social Research Council to understand socio-economic change at the individual and household level.

Cultural Capital and Social Exclusion: a Critical Investigation, 2003-2005 is one of many studies deposited by academic researchers. This mixedmethods study is by the ESRC Centre for Research on Socio-Cultural Changes.

### **Teaching resources**

You can find a range of resources on the UK Data Service website which have been developed in consultation with teachers. All can be downloaded or used online, either for self-directed learning or teaching in the classroom.

They include:

- online teaching resources to guide students in using and collecting research data
- hands-on workbooks containing worked examples, which can be used as learners gain experience with secondary data
- resources for teachers, providing practical advice and plans.

### Popular resources

Folk Devils and Moral Panics: The creation of the Mods and Rockers, a teaching resource based on Stan Cohen's pioneering sociological study into youth culture. Suited to A-Level or undergraduate social science courses, for self-directed learning or as an assessment.

Using Survey Data, a guide for students doing project work and dissertations. Using an example research project, the guide moves through the stages of research from research questions and design to finding and accessing relevant data, getting started with data analysis and reporting results. It includes material to read alongside questions and worksheets.

To learn more, see: ukdataservice.ac.uk/use-data/ teaching/ teaching-resources



# Student Resources webpages

Designed for those first encountering the rich world of data, these webpages offer summaries of our data collections most useful for students, a select set of resources, a guide to getting started with finding, accessing and using data and some FAQs.

See: ukdataservice.ac.uk/use-data/ student-resources

# It's not just about methods teaching...

Our data are excellent for teaching research methods and data analysis and can be used to embed real-world examples in methods courses.

But with the increasing emphasis on embedding evidence in teaching, our data are also at home in substantive courses. II The UK Data Service makes it easy to access data on almost every imaginable debate in contemporary social science, making it an essential resource for teaching any subject.

'Real data' are not only more attractive to students, they also give them a much better understanding of how research is done, and the difference between evidence and armchair philosophy.

John MacInnes, University of Edinburgh I The UK Data Service is a goldmine of social data with which to enliven methods teaching and make it relevant to the interests of social science students....

The huge range of data resources available makes it possible to carefully match data to the disciplinary background and substantive interests of the students.

From a student's perspective, this helps enliven the experience of learning how to do quantitative research, and makes it relevant and connected to the substantive content of their degree programme.

Mark Brown,

University of Manchester



### Learning and teaching guides

#### Video tutorials

We have a wide variety of guides, all available online:

- topic guides which identify data available for a particular theme such as crime or housing
- guides about specific datasets, such as the OECD migration statistics or census flow data
- methods and software guides such as 'What is Weighting?'
- guides to exploring data online using tools such as UKDS.Stat to access and visualise international time series data, and Nesstar to explore survey datasets.

Discover our guides: ukdataservice.ac.uk/use-data/ teaching/ teaching-resources Where appropriate, we produce video tutorials to provide click-by-click demonstrations of how to make use of our data and resources.

Browse our video guides collection at: www.youtube.com/user/ UKDataService

#### Data Skills Modules

These introductory level interactive modules are designed for users who want to get to grips with key aspects of survey, longitudinal and aggregate data.

Modules can be conducted any time and students can dip in and out when needed.

They give an introduction to key aspects of the data using short instructional videos, interactive quizzes and activities using open access software where possible. Each module takes about 2 hours or less.

Find here: ukdataservice.ac.uk/use-data/dataskills-modules It is very rewarding to see how students take existing datasets and apply their own understanding and interpretation to rich, complex data in rigorous and creative ways.

Jo Haynes, University of Bristol

### Resources for teachers – by teachers

We collate and share examples of teaching with data through our Teaching Ideas and case studies.

Teaching Ideas are short (2-page) documents outlining a topic and research question, a data source, set of exercises, a snapshot of results and supplementary activities.

Current ideas include:

- public confidence in the police
- gender differences in sexual attitudes
- risk factors associated with increased levels of systolic blood pressure.

Examples of current case studies:

- understanding the global economy using real-world data
- introducing students to politics through real data
- preparing students for that final year project.

#### See:

ukdataservice.ac.uk/use-data/ teaching/ teaching-ideas

# Demonstrating the impact of data-driven teaching

If you are willing to share your teaching experiences, methods and materials, we can feature your work on the website in a teaching case study.

Get in touch at: comms@ukdataservice.ac.uk

# Training for students and teachers

Our programme of training events complements other training provided through national organisations such as the National Centre for Research Methods (NCRM).

Sessions include general introductions to research data management and to using data such as large-scale UK surveys and census tables.

We also periodically run events specifically for teachers and for students at different stages of their studies.

Training is available through face-to-face workshops and webinars (live online seminars), most of which are recorded and made available on our website.

You can browse our current training events at:

ukdataservice.ac.uk/news-and-events/ events

For a small fee, we can also provide presenters or content for other events.

Please get in touch: comms@ukdataservice.ac.uk

### We are listening

If you need guidance or support, we can help.

Our FAQs include a comprehensive list of answers to the most common questions and problems faced by teachers and researchers who use secondary data:

#### ukdataservice.ac.uk/help/faq.aspx

Our helpdesk of data experts can support you and your students if you hit a problem:

We also conduct periodic consultations and listen to feedback on an ongoing basis.

Please contact the helpdesk to share your comments and suggestions about our data, training and resources.

ukdataservice.ac.uk/help/get-in-touch



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