

Contributing to the accessibility of quantitative skills

The efforts of COMPASS since 2004

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Overview

- Reporting on the problem
 - Social Science Reference Group (2001 & 2005)
 - Economic & Social Research Council (2009)
 - Centre of Methods and Policy Application in the Social Sciences (2010)
- Formulating a response
 - New Zealand Social Statistics Network (NZSSN)
 - New Zealand Social Science Data Service (NZSSDS)
 - Teaching – SPSS workbooks; UoA courses in Sociology / Political Studies

Improving the knowledge base for social policy

To ensure social science research can better inform social policy development and implementation ... [by] ... improving connections, increasing resources, and enhancing capacities.

What needs to be done to support exchanges of people between universities and government departments ... [and] ... how universities can respond to the need of social policy agencies for graduates with project management, quantitative, and evaluation skills.

Social Science Reference Group report to MoRST (2001)

Improving connections, increasing resources, enhancing capacities

- University research project managers to monitor research grants more effectively; findings to be disseminated more appropriately
- MoRST & Royal Society to establish an independent, web-based, peer-reviewed social science journal
- Tertiary training of social scientists to provide more hands-on experience of analysis of quantitative databases
- Bottom line: mechanisms already exist to meet the need for more and better research, but more funding is required!

Coming of age (Social Science Reference Group 2005)

- SPEaR, BRCSS, Kōtuitui social sciences journal, and a biannual Social Policy Research and Evaluation conference set up
- Still minimal academic–government collaboration; minimal interdisciplinary research in general
- Social sciences century: contribute to the wealth of NZ and its peoples, and enhance our quality of life
- Indigenous knowledge – Ngā Pae o te Māramatanga in 2002; MoRST's Vision Matauranga in 2005

Enquiry into use of numeric data in learning & teaching

British universities and colleges are not producing quantitatively competent social scientists in sufficient numbers.

Gordon Marshall, CEO, Economic and Social Research Council (2001)

Getting through statistics and quantitative methods was necessary but unappealing, and made difficult by a lack of enthusiasm in teachers.

Economic and Social Research Council project report, Williams M, et al. (2008)

Promote subject-based statistical literacy for students, and support staff who wish to incorporate empirical data into substantive courses.

Joint Information Systems Committee project report, Rice R, et al. (2001)

Proposals to improve quantitative teaching in the UK

- Cost pressures, lack of skilled staff, student hostility to numbers; lack of secondary data analysis in teaching
- In 2008 the ESRC proposed to develop a teaching framework in quantitative methods covering the whole education life course
- This report proposed a degree programme with certification, possibly as prerequisite to postgraduate study
 - Be popular; set exacting but achievable standard; become prestigious

Addressing the quantitative skill shortage in the social sciences

- Lack of quantitative skills among NZ social science graduates; training for academia while many will work in public sector
- Limits postgraduate study if overseas universities require quantitative methods
- Teachers on short-term contracts due to lack of skills in-house
- Already in 2004, we had begun to address these issues locally

New Zealand Social Statistics Network

- Based on the model of, and initial consultation with, ACSPRI
- Ran its first short course in Auckland in February 2005, on Mixed Methods, with 18 attendees
- Annual summer short course programme established starting in 2006, usually in Wellington

	2005	2006	2007	2008	2009	2010
Courses	1	5	3	5	8	11
Enrolments	18	35	24	58	71	131
Average per	18	7	8	11	9	12

NZSSN winter programme & reworking

- In 2011 a winter programme in Auckland was added; in 2013 we transitioned to an alternative summer timing

	2011 Feb	2011 Jul	2012 Feb	2012 Jul	2013 Feb	2013 Nov	2014 Nov
Courses	11	5	12	2	5	10	7
Enrolments	149	41	120	14	44	103	43
Average per	14	8	10	7	9	10	6

- We are currently planning courses for November 2015
- <http://www.nzssn.org.nz>
- Bottom line, not intended to make money – *a responsibility*

New Zealand Social Science Data Service

- One-year funded project in 2007 to set up an online data archive
- Consultation with Australian Social Science Data Archive and setup of NESSTAR software on the Advanced Network
 - NZ Election Study, International Social Survey Programme, World Internet Project NZ, and projects internal to COMPASS
 - Free access to survey metadata; access to most data on request
 - Crosstabs, graphs, and regression available in the online interface
- Bottom line, NESSTAR licence fee \$US12,000 p.a.; poor uptake

NZSSDS other resources

- Enhanced publications – journal articles presented with data sets and program code used to produce outputs
- SPSS workbooks – case studies from NZSSDS using reduced ‘teaching data sets’ and aimed at self-teaching
- Project outputs – inline HTML versions of reports and working papers, allowing for potential updates

Research methods teaching

- SOCIOL701 Advanced Research Skills was offered in 2005; we instructed students in Excel, SPSS, and NVivo
- It returned in 2010, streamlined with options to do only quantitative (SPSS), only qualitative (NVivo), or both
 - Peter lectures for the quantitative and I instruct in the labs
 - Lab exercises are assessed, albeit very lowly weighted, as motivation
 - The main project involves constructing and testing a hypothesis

Quantitative instruction

- Data manipulation in SPSS interfaces; sorting and filtering data
- Coding variables; variable formats and types
- Recoding variable categories; summaries via statistics and tables
- Crosstabs and interpreting percentages; measures of association
- Accounting for a third variable in tables and measures
- Students choose a data set from NZSSDS for their projects
- Bottom line, we as COMPASS do not get paid for this at all

Summary

- NZSSN and teaching: ensuring social sciences can inform policy, enhancing capacities both among students and the labour force
- Teaching: helping universities respond to the increasing demand for quantitative skills
- NZSSDS: supporting staff who wish to teach with empirical data; increasing availability of data and use of secondary data analysis
- Bottom line, as ever, doing what we can with what we have