

The art and science of the single case as a resource for educational practice and policy

David Bridges

Professor Emeritus University of East Anglia,
Emeritus Fellow St Edmund's College and
Homerton College Cambridge

Overview

- What is case study?
- N=1 (or 2 or 3): Is there a problem?
- Quantitative methods and case study
- The single case in science, social science and the humanities
- Learning from case study: from the particular to the particular
- Case study as a 'vicarious experience'
- How do advocates of case study respond to the challenge of 'generalisability'?
- Educational understanding is always going to be understanding of particularities?
- Case study: science or art?

What is case study?

- It has a focus on an example (c..f a sample) of a class of subjects
- It is 'bounded' -- it is a case of *something* -- 'an instance drawn from a class' (Adelman et al. 1976: 141)
- It is described/ narrated fully ('thick description' as Stake calls it – including relevant quantitative data) placed in its historical and social context
- It aspires to capture the complex interaction of multiple variables
- It is written in ordinary language (and/or the language of participants)
- It is not a research method as such: it is a way of focussing research and a way of presenting research but may employ any from a range of research methods (eg interviewing, observation, textual analysis, iconographic analysis) drawn, for example, from ethnography, auto/biography, history including 'contemporary history' (Stenhouse)

N=1 (or a small number): Is there a problem?

- Dominant paradigm in educational research of quantitative methods and an obsession with measurement (even of the unmeasurable) and 'the law of large numbers'
- Current enthusiasm for large data sets to provide in particular a measure of system performance

Quantitative methods and case study

- Quantitative methods can often highlight areas that require something like case study to answer '*how?*' and '*why?*' questions or explain aberrant examples
- Case studies may highlight the need for quantitative methods to assess the *scale* of a particular issue identified
- Quantitative methods tend to focus on a small selection of variables which it seeks to control; case study illustrates the complex interaction of multiple variables
- What cannot sensibly be measured can however be *described, discerned, illuminated* by case study
- Numbers still need a narrative

The single case in science, social science and the humanities

- In science – the use of the single case to refute a conjecture (cf Popper) or to confirm a theoretically derived hypothesis
- In ecological studies (case study is in a sense social ecology)
- In history – a focus on a single example as a window on a world
- In biography or autobiography
- In sociology and anthropology
- In literary studies
- In law
- In psychology (cf Freud or Piaget)

Learning from case study: from the particular to the particular

- In its most significant form, generalisation about the case promotes generalisation from case to case ... as in art, which teaches by example rather than precept ... (Adelman et al. 1976: 142)
- When Kennedy asked teachers what persuaded them about the utility of a particular piece of research, she began to build up a picture that, in fact, applied independently of the genre of research which they encountered: 'teachers *forged analogies* between the studies they read and their own situations or practices' (Kennedy 1999: 537, my italics).
- Often the situation ... is one in which there is need for generalisation to a similar case rather than generalisation to a population of cases. Then the demands for typicality and representativeness yield to need for assurance that the target case is properly described. As readers recognise essential similarities to cases of interest to them, they establish the basis for naturalistic generalisation. (Stake 1980: 71)

Case study as a 'vicarious experience'

- Experimental research 'guarantees' the veracity of its generalisations by reference to formal theories and hands them intact to the reader; case study research offers a surrogate experience and invites the reader to underwrite the account, by appealing to his tacit knowledge of human situations. The truths contained in a successful case study report, like those in literature, are 'guaranteed' by 'the shock of recognition'. (Adelman et al. 1976: 143)
- One of the more effective means of adding to understanding—for all readers—will be by approximating through the words and illustration of our reports the natural experience attained in ordinary personal involvements. (Stake 1980: 65)

How do advocates of case study respond to the challenge of ‘generalisability’?

- Drawing inferences from the particular to the particular
- Case study as ‘vicarious understanding’
- Come up with specialised forms of generalisation eg *analytic* (Yin 1994), *retrospective* (Stenhouse 1980) *naturalistic* (Stake and Trumbull 1982), *fuzzy* (Bassegy 2001)
- ‘Case reasoning’ -- ‘The policy-maker’s grasp of actualities is not so much enhanced by the straightforward application of general principles as by judgements that are tutored by the comparative study of cases’ (Elliott and Lukes 2009: 89)
- Case study as a basis for ‘conjecture’ (Popper)) or a foundation for ‘grounded theory’ (Glaser and Strauss)
- Dismiss the object of generalisation and theory building in favour of sympathetic understanding (‘verstehen’) and learning
- Accept that educational understanding is always going to be understanding of particularities in all their individual complexity

Educational understanding is always going to be understanding of particularities?

- The real world of the social/natural is composed of evolutionary and interacting systems. The epistemological consequence of this is that knowledge is inherently local. We cannot appeal to universal laws applicable everywhere ... as the basis for generalisation'. (Byrne 2002: 74–75 in *Interpreting quantitative data*)
- 'No two schools are sufficiently alike in their circumstances for prescriptions of curricular action to be able adequately to supplant the judgement of the people in them' (Macdonald 1971, cited in Simons 1971: 118).
- 'Theory is useless to the practitioner unless he can subject it to situational verification, that is, test it in the situation in which he currently finds himself' (Stenhouse 1977: 3).

Case study: science or art?

- In [three] crucial ways ... case study work is like all forms of science: it is an empirical process of truth seeking; it is a social, cultural and cognitive process; and it resolves in its practice the double problem of justified true belief—the justification of belief and the belief in justification. (Kemmis 1980: 106)
- Case study is the way of the artist, who achieves greatness when, through the portrayal of a single instance locked in time and circumstance, he communicates enduring truths about the human condition. (MacDonald and Walker 1975/1977: 3)

For fuller account and references

- Bridges, D (2017) *Philosophy and educational research: Epistemology, ethics, politics and quality*. Dordrecht: Kluwer/Springer.