Case studies – How many? How to select?

The case study selection process

A case study approach underpins the validity of many research projects. The cases have to provide the access required by the study but at the same time they have to offer a diverse organisational mix and provide both a wealth of practices or specific practices. Subsequently the study has to seek out diverse organisational actors within each case to gain multiple perceptions of practice.

As an inductive study, Billett (1996) indicates the value of a constructivist approach with case studies is in developing an understanding of learning practices in the workplace. This approach is underlined in McDonald's (1995/99) reviews of evaluation of vocational education and training in Australia. The relationships of workplace learning operate in deeply contested organisational space, and require considerable field interaction to gain multiple perspectives of the performances, and to develop an understanding of the emerging practice.

Inductive research studies are therefore largely based on a framework that consists of *a sample of cases* chosen for their diversity where the study can explore multiple practice, describe the diversity of practice and explain the critical mediating factors (Yin 1993). Yin (1994) describes four basic research designs and positions them in a two-by-two matrix. The first dimension concerns the use of single or multiple cases. The second dimension concerns the use of a single-holistic unit of analysis or the use of multiple, embedded units of analysis. Yin suggests that the choice of case design depends on the type of question that the research is asking, the degree of control that can be exercised over the case, and the focus on current or prior phenomena. This study involves multiple cases and multiple units of analysis, and in Yin's terminology is a multiple embedded case study, type four (Yin 1994, p. 39).

Multiple cases offer a robust framework for data collection (Remenyi et al, 1998), and are a source of explanatory data to feed subsequent generalisations about the how and why of the network explored. These multiple case studies are included to increase the explanatory power and generalisability of the data collection process (Miles & Huberman 1994, p. 172).

Cases may form a purposive but non- probability sample. Merriam (1998) indicates that a non-probability sample is effective when, as in this study, the research is exploring *what is occurring.* Patton (1990, p. 169), suggests that such a purposive sample, 'has a logic and power - and provides rich information'. This collection of cases is selected so that it provides a *structural representation* that matches the purpose of the study (Stake, 1994; Remenyi, Williams et al., 1998).

It is therefore evident that the *quality of the case selection process* has a significant influence on the effectiveness of the study. Sequential approaches to case studies may enable the researcher to determine when theoretical saturation has been achieved, but this is incompatible with the longitudinal approach of this study.

Criteria for case study engagement

In most studies, resource allocations limit the population to which the selection criteria can be applied. However with a purposeful sample, there is a natural reciprocity between selection criteria and opportunity, or serendipity, encountered when 'operationalising' the study in the field of practice.

Criteria that may be used for selection include:

Enterprise/Institute Characteristics
- Industry sector
- Size
- Location
- Number of sites
- Percentage of workforce employed

In addition to selecting a sample, there may be a series of conditions that each case must meet to be available for selection such as:

- available for a specific time
- willing to sign an agreement
- having a diverse practice environment
- having specific practices in operation
- not having an environment, size or structure duplicated by another case

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