# L&T@UNSW CONNECTIONS SERIES 2009

# **Research Design Options:** Phenomenography

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### BACKGROUND ON MY RESEARCH...

Capacity-development at work: The contribution of workplace-based learning to tax administration

### BACKGROUND ON MY RESEARCH...

 Aim – develop innovative means for developing capacity in workers

 Research question - explore the extent to which a program can develop capacity in workers

# BACKGROUND ON MY RESEARCH...

- Fundamental principles that needed to be taken into account and built into the research methodology included the need to:
  - take a relational, holisitic approach to learning
  - focus on future potential and adaptability, rather than a narrow conception of current 'ability'

### BACKGROUND

Used a case study method

- Collected written data, based on learning journals, including descriptions and understanding of experiences
- Needed an appropriate data analysis technique
  - interpretation would focus on the development of the learners' conceptions of the phenomena encountered (the program)

• Phenomenographic analysis is also known as:

- empirical phenomenology,
- phenomenologically grounded empirical psychology, and
- contextual analysis (Marton, 1981, 1986)).

 Adopted for mapping the qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and phenomena in, the world around them (Marton, 1986, p. 31).

- Phenomenographic analysis produces a descriptive model of qualitative variation in the ways individuals experience a phenomenon, ie, what changed
- o not the process of that change or the reason for the variation (Marton, 1986).

• The approach will identify similarities and differences in the way the participants experienced and understood an event.

 Can be used to study a range of issues, including approaches to learning and teaching, understanding of general issues in society....

- This technique provides insight that cannot otherwise be derived.
- We cannot derive an understanding of what people think from what we know or what we can observe (Marton, 1981).

"The emphasis is on how things appear to people in their world and the way in which people explain to themselves and others what goes on around them and how these explanations change"

(Barnard, McCosker & Gerber, 1999, p. 214).

### UNDERLYING PROPOSITION

• Ways of experiencing represent a *relationship* between the experiencer and the phenomenon being experienced.

 'The world, [as experienced] is not considered to be constructed by the learner, or imposed upon her; it is constituted as an internal relation between them' (Marton & Booth, 1997, p. 13).

# BENEFITS

Phenomenographic analysis:

- ...provides a way of looking at collective human experience of phenomena *holistically*' (Åkerlind, 2005, p. 72) – it espouses a non-dualistic ontology
- assists in determining the extent to which change in conceptions has occurred
- allows for comparison in development and stages of development change

#### DOING PHENOMENOGRAPHIC ANALYSIS

 The technique is traditionally used on interview transcripts, but can also be applied to data collected from surveys or journals.

• Different to content analysis:

- When using content analysis categories that responses are sorted into are pre-determined
- Phenomenographic categories may include the unexpected, and not include those anticipated...

### DOING PHENOMENOGRAPHIC ANALYSIS

Broadly, the steps in phenomenographic analysis are:

- 1. Identify distinct ways the phenomena was experienced;
- 2. Group the experiences, aiming to understand at as deep a level as possible what has been said or rather what has been meant;
- 3. Make sense of the particular expressions in terms of the group of participants as well as the individual context;
- Develop a set of categories of description (outcome space) that characterise the variation in how the phenomena has been experienced, conceptualised or understood; and
- 5. Establish a hierarchy.

#### DOING PHENOMENOGRAPHIC ANALYSIS

• The different steps in the phenomenographic analysis are taken interactively.

• Each step has implications for both those that follow and those that precede it.

 In reality, the analysis is conducted several times in which the different steps are considered simultaneously (Åkerlind, 2005, p. 67).

# EXAMPLE - MY RESULTS

Categories or levels of recognition of learning identified:

1.Recognition of the value of learning and need for ongoing learning

2.Increased confidence as a result of improved understanding of own learning/'learning skills'

- 3. Indication of learning about learning
- 4. Indication of the intention to change work practices/better ways of working
- 5. Personal transformation as a result of better understanding of how they learn

#### PHENOMENOGRAPHIC ANALYSIS - ISSUES

- The phenomography method of data analysis may raise questions of interpretative rigour, in terms of whether another researcher examining the same data would come up with the same results.
- Marton (1994, p. 4429) addresses this issue by explaining that the analysis is not a measurement procedure but one of discovery.
- Provided another researcher can judge what categories of description apply to each individual case with a reasonable degree of agreement, the method is considered reliable.

#### PHENOMENOGRAPHIC ANALYSIS - ISSUES

 Sandberg (1997) suggest that the creditability of phenomenographic results can be bolstered through interpretive awareness.

• There are, however, no guarantees that researchers have achieved creditability with respect to the accurate reflection of the experience of the individual being investigated.

 Giorgi (1988, p. 173) argues for the use of "checks and balances" which he suggests primarily "come through the use of demonstrative procedure".

#### REFERENCES

Åkerlind, G. (2005). Learning About Phenomenography: Interviewing, data analysis and the qualitative research paradigm. In J. Bowden & P. Green (Eds.). *Doing Developmental Phenomenography.* RMIT University Press, Melbourne, pp. 63-73.

Barnard, A., McCosker, H. & Gerber, R. (1999). Phenomenography: A qualitative Research approach for exploring understanding in health care. *Qualitative Health Research*, 9(2), pp. 212-226.

Giorgio, A. (1988). Validity and Reliability from a Phenomenological Perspective. In W. Baker, L Mos, H Rappard & H. Stam (Eds.). *Recent Trends in Theoretical Psychology*. Springer Verlag, New York, pp. 167-176.

# REFERENCES

Marton, F. (1994). Phenomenography. In Husen & Postlethwaite (Vol 8 Eds.). *International Encyclopedia of Education* (2<sup>nd</sup> ed.). Pergamon, New York, pp. 4424-4429. Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought*, 21(3), pp. 28-49. Marton, F. (1981). Phenomenography – Describing conceptions of the world around us. *Instructional Science*,10, pp. 177-200.

Sandberg (19Sandberg, J. (1997). Are Phenomenographic Results Reliable? *Higher Education Research and Development*, 16(2), pp. 203-212.