

Methodological pluralism and narrative inquiry

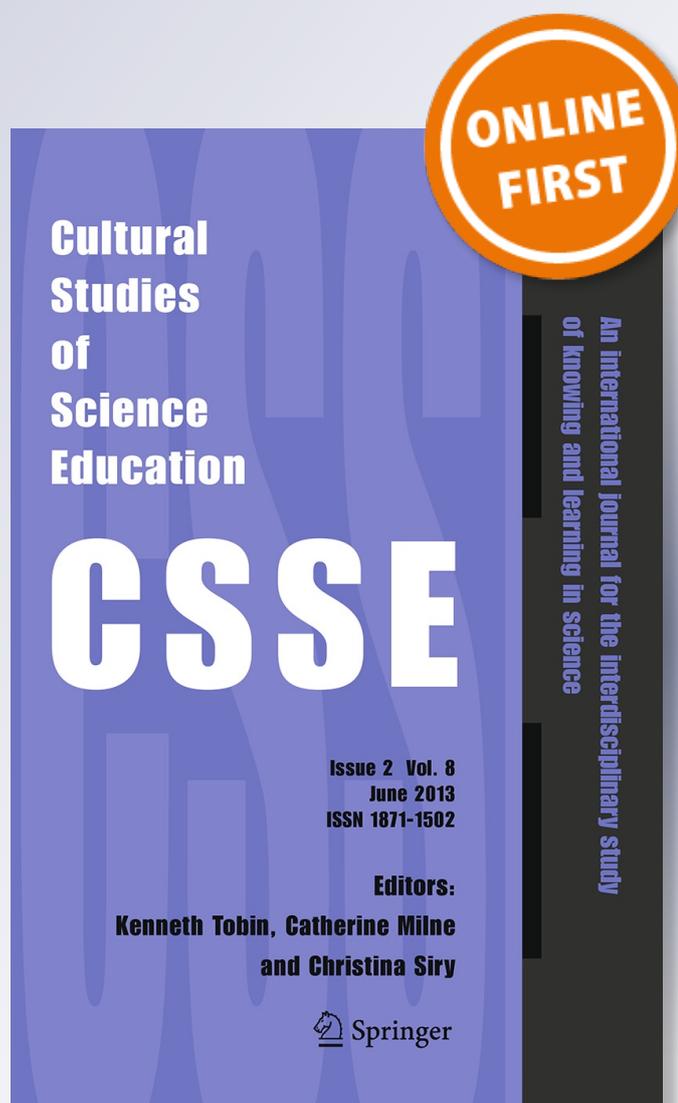
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Abstract This paper considers how the integral theory model of Nancy Davis and Laurie Callihan might be enacted using a different qualitative methodology, in this case the narrative methodology. The focus of narrative research is shown to be on ‘what meaning is being made’ rather than ‘what is happening here’ (quadrant 2 rather than quadrant 1). It is suggested that in using the integral theory model, a qualitative research project focuses primarily on one quadrant and is enhanced by approaches suggested in the other quadrants.

Keywords Narrative inquiry · Integral theory model · Methodological pluralism · Qualitative research

In their paper, Nancy Davis and Laurie Callihan make the point that methodological pluralism—using a diversity of methodological approaches—is becoming more common in educational research, including the field of science education research. This can include mixed methods research combining quantitative and qualitative approaches (Johnson and Onwuegbuzie 2004), although Davis and Callihan are looking at a range of qualitative approaches in the quest for research “with quality”. Thus they seek to categorise the methodologies which are used according to Wilber’s Integral Methodological Pluralism, and consider it in the context of Callihan’s doctoral study. I consider it retrospectively in the context of my own doctoral study (Michie 2011) which was also undertaken using a qualitative methodology.

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This paper responds to issues raised in N. Davis and L. Callihan’s (2013) paper “Integral methodological pluralism in science education research: valuing multiple perspectives”, doi:[10.1007/s11422-012-9480-5](https://doi.org/10.1007/s11422-012-9480-5).

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Davis and Callihan make use of Wilber's 4-quadrant model to categorise the various methodologies of inquiry, including the goal of the inquiry, its aim and the quality criteria. They consider that certain methodologies are suited to particular kinds of investigations and that each of these has specific aims and quality criteria. They then demonstrate how Callihan used the various methodologies more specifically in her dissertation. Their paper restricts us to brief descriptions of each quadrant and the methodology used. The primary focus is apparently on quadrant one (the upper right quadrant) which looks at the data which was collected about "what was happening here?" Without referring to the dissertation itself, it seems that this first quadrant is where most of the data were collected and used, and underpin the study. Similarly, it is difficult to see in which ways the study integrates the methodologies identified for the four quadrants, whether this is organised by chapters or integrated on a wider scale.

My own work: using a narrative methodology

In this section I am going to outline my own doctoral study in retrospect and consider how it might visualise the Davis and Callihan structure. In Michie (2011) I look at working cross-culturally in indigenous science education. Based on concepts such as border crossing and culture brokerage, I look at why some people are able to work successfully in cross-cultural settings. I use an identity learning model proposed by Geijssel and Meijers (2005) to support the idea that border crossing promotes positive identity learning and this enhances people's ability to work cross-culturally.

I use a narrative inquiry methodology, starting with interviews with eight participants whom I had identified as successful cross-cultural workers, all with backgrounds in education and some in science education. I use both narrative analysis and analysis of narrative approaches of Polkinghorne (1995) in the treatment of the data. Narrative analysis leads to the creation of the stories for each participant. In part, some of the data consists of a life history particularly where the participant discusses their childhood as well as their early career experiences with indigenous people. The participants' voices are heard particularly through the use of extended interview extracts. I construct a narrative story for each of the participants, focusing on three areas around which the interviews had been constructed:

- early cross-cultural influences, identifying border-crossing experiences
- understanding culture brokerage
- teachers in cross-cultural settings.

Preparation of the narratives is supported by the participants' own writings and considered in relation to both the wider literature and my own experiences.

In the analysis of the narratives, common concepts are developed from across the participants' data derived from the stories and are compared with each other and other research literature. The participants' responses are within the context of their experience and they "describe when events occurred and the effect the events had on subsequent happenings" (Polkinghorne 1995, p. 12).

For verification, or quality criterion in narrative inquiry, the *voice* of the participants is given high priority by the extensive use of quotations from the interviews throughout the narratives and thus into the data chapters. Voice refers to how researchers allow their informants to be heard directly, allowing participants to speak for themselves in the texts that the researcher creates (Lincoln and Guba 2000). This is augmented by the use of quotations from the participants' writings, not simply as an attempt to triangulate or validate the interview data, but to further illustrate the idea or 'facet' (Richardson 2000, as part of her crystal

metaphor) under discussion. Voice can also include that of the researcher, allowing them to be located within the text although realising that the authoritative nature of the researcher's voice is neither absent nor hidden. In writing a narrative there is a problem of maintaining a balance between the researcher expressing their voice and telling of the participants' storied experiences (Clandinin and Connelly 2000). Similarly, other authors from the literature can be referred to or quoted from to enhance the ideas being explored. *Reflexivity*, where a researcher takes on the role of both inquirer and respondent in the process of researching, affects the choice of research problem and those who are engaged with in the research, as well as the self in the research setting. However solipsism, regarding the self as the object of real knowledge, and narcissism, overstating the value of one's own contribution, need to be avoided in considering both voice and reflexivity (Clandinin and Connelly 2000).

Much of the indigenous research I read makes use of narrative-type methodologies: these include conversations (e.g. Haig-Brown 1992), conversations and chats (e.g. Bishop 1996) and yarning (e.g. Power 2004). These explore methodologies to involve Indigenous people in the research process, not solely to be the researched.

Comparison with the integral theory model

It would be disingenuous to suggest that narrative inquiry fits neatly into Davis and Callihan's integral theory model; it is not amongst the qualitative methodologies they list in their Figure 4, and some authors have suggested that narrative inquiry belongs in a third category other than qualitative and quantitative research. The purpose of my research reported briefly above is interpretive rather than descriptive, fitting most closely with Davis and Callihan's query, "What meaning is being made?" As in their own example, my research is focused in one quadrant, in this case the second or upper left quadrant, but benefits from inputs from the other quadrants. The purpose of my research is to make meaning of how the participants understand their experiences working cross-culturally. They were selected on the basis that they would be truthful in their responses so trustworthiness and sincerity were essential qualities. Their voice is evident throughout the analysis of the data as extracts from the interview and their writings. The voice of the researcher is also evident, in direct statements and in limited reflections.

When I consider inputs from the other quadrants, the literature review, in which I found discussions about cross-cultural work, provides my research with evidence relating to the first or upper right quadrant. The literature identifies processes relating to cross-cultural work (the what) rather than analyses them (the why). In turn I use the literature by working it into the narratives and the subsequent analysis of narratives. Davis and Callihan suggest that the third quadrant, the lower left, focuses on shared understanding or consensus. In my research there are some shared outcomes but mostly the research is about unique experiences for each participant. I find it difficult to see how I might have used the fourth, lower right quadrant. Overall, each quadrant provided narratives which could be integrated through the analysis of narrative stage, so that methodologically there is a degree of uniformity. This is not a feature of the integral multiple perspectives.

Concluding statements

The main idea I came away with from Davis and Callihan's paper was that here is a template that a researcher could use, allowing them to compare methodologies with

specific criteria and quality controls. However, to do so in the belief that their research methodology would be evenly distributed across each of the four quadrants would be naïve. There is a major distinction between the focuses of the two research methodologies summarised in the initial questions that Davis and Callihan ask: “What is happening here?” and “What meaning is being made?” This immediately places them at conflicting purposes, where one can be informed by the other. Asking ‘what is happening’ doesn’t necessarily imply ‘what meaning is being made’, although asking ‘what meaning is being made’ implies that there is some knowledge of ‘what is happening’.

Some people would see using templates as too controlling or authoritarian. In post-modernist and post-colonialist research, where qualitative methodologies are used, there is no grand narrative, rather a plurality of discourses exists. Using a template could be seen as being counterproductive in these situations.

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