Disaggregating Rural Education in NSW: Methodological and Ethical Issues in Making Public Data Public Knowledge

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Abstract

This paper is part of a larger project in which we are interested in producing forms of system-based and other government agency data as a basis for understanding the phenomena associated with the gaining, training and retaining teachers in rural and remote NSW – the ARC Linkage project entitled the "Rural [Teacher] Education project (R[T]EP)". Our position is that more than inducements need to be identified to attract teachers to the bush and keep them there. In this paper we consider the issues associated with what data are most useful and how these data might be presented in responding to our research questions. Technical issues are discussed. In the paper we present examples of processes and protocols to obtain access to educational and sociological data and suggest ways they might be utilised to more ably equip teachers for life and work in rural NSW schools and their communities. The issues of public data and public knowledge emerge as generate ideas for our analysis.

Introduction

In this paper we explore the relationships that developed between one (industry) partner and another partner (two universities) in a major Australian Research Council (ARC) Linkage project. ARC Linkage grants are a Commonwealth Government structural mechanism to connect the academy to industry. In addition to this Federal Government policy, the complexity of our research relationships are also attributable to what Marginson (2000) suggests is a combination of a declining government commitment to universities, an associated corporatisation of tertiary administration, and what he calls an increasingly 'embattled academic profession' as it seeks to undertake its research mandate. Over the past decade university researchers by necessity have had to look elsewhere for research funding, and compete with tertiary institutions and others for research opportunities and funding sources. In recent years collaboration between universities and industry, and also between a variety of previously unrelated partners, has proliferated, sometimes as Smyth and Shacklock (1998) suggest, uncritical of the longer term consequences.

It has been in this environment that the R(T)EP research partnership has been formed between major partners, The University of New England (UNE) and Charles Sturt

University (CSU) and the New South Wales Department of Education and Training (NSW DET). In addition to these research partners, other key players included the Commonwealth funding body as well as a number of individual schools and their communities, District offices and others, all adding to the complexity of the partnership dynamics. Establishing such a large association of different groups was a major undertaking. For example, agreements with three NSW DET Directorates were obtained prior to the ARC Linkage Grant being approved. These agreements directly concerned in-principle access to data. In addition R(T)EP researchers have also had to enter into an agreement with NSW DET as administrator of the schools into which R(T)EP researchers wish to enter (NSW DET 2002). These undertakings involve such issues as obtaining data in ways non-threatening to participants and institutions, safe storage and eventual destruction of data, and most tellingly for R(T)EP, confidentiality where individual schools and their staff and students are concerned (NSW DET 2003). Confidentiality here is founded upon individual rights to privacy, an issue which researchers learn about early in their research training. The complexity of this project and the number of people involved created the potential for such data handling to slide inadvertently into a trap in which confidentiality might be breached. The industry partner had the reasonable requirement that this did not happen. Furthermore, in some cases, a breach of confidentiality could be contrary to the requirements of the *Education Act 1990* (NSW State Government 1991). This Act seeks to ensure that public schools in NSW cannot be ranked. In addition to establishing these agreements, as researchers we have undertaken to follow high ethical standards as set out in our ethics clearance (CSU 2003 and ongoing; Commonwealth of Australia 1999) as well as probity checks (see NCCYP 2003).

The issues of confidentiality have been particularly challenging for R(T)EP. One of the underlying assumptions of the project is the uniqueness of the context in which rural schools operate. It is on this point that the project seeks to break away from other major antecedent school reform projects, such as the Queensland Longitudinal School Reform project (Lingard *et al* 2002) and the Wisconsin project (Newman *et al* 1996). Both these projects, as far reaching as they are, advocate a largely uniform set of strategies independent of location, in other words a one size fits all approach (McConaghy 2002). R(T)EP maintains that a more nuanced view of a particular school's economic, social, historical and geographical context is crucial in addressing

a problem such as the uneven learning outcomes for rural students in NSW schools and associated problems of teacher attraction and retention. Furthermore, an important part of the original proposal was to incorporate cartography into the research as a research process, that is, to map relevant movements and placements of data across the eleven DET Districts to the west of the 'sandstone curtain' in NSW. The challenge for R(T)EP in its handling of data is to create a focus out of 'place' yet at the same time adhere to multiple sets of ethical guidelines that limit in many ways the disaggregation of data that will lead to the identification of individual 'places'. A recent South Australian study entitled the 'Teacher's Learning Project' (McInerney 1998) involving exemplary school sites circumvented this problem by openly naming individual schools and their communities. Agreements to do so were built into the aims of the project from its inception to enable this to happen. There was a general acceptance that researchers 'were not going to do a job on schools' (McInerney 1998:5). R(T)EP, while focusing in part on interesting or 'lighthouse' sites, is also turning its gaze on particular sites where learning outcomes are uneven. R(T)EP also does not intend 'doing a job on schools', however, its inability to be specific about place creates a greater problematic. In NSW naming of a school in a research study can be problematic and is a central concern to this paper.

The dilemma faced by R(T)EP here is usefully illustrated by Tickle (2001) who likens such tensions to 'windows opening' and 'doors closing'. It is a tension found particularly in research that attempts to be transformative. Such research is nearly always revelatory, but at the same time revelation can be harmful. Put alternatively, major ethical tenets of research such as openness, anonymity and confidentiality sit in an uneasy tension: the need to 'know' (to create public knowledge) is countered by the need to 'protect' (to maintain knowledge as private). These tensions, as Tickle (2001) suggests, are dealt with variously by those who teach research methods to would-be researchers. Tickle cited one text where students are told not to reveal anything of a personal nature in their research, while at the same time they are told to let all interested parties know what they were doing, but to do so without mentioning real names (see Tickle 2001, 350)! Rather than letting such a dilemma de-rail a research agenda, Tickle's suggested way around this impasse was the adoption of what he calls 'practical wisdom'. Illustrations are given from his own experiences as an action researcher involving at times careful re-negotiations with research partners

after confidentiality agreements had been reached. In later sections of this paper we will reflect on R(T)EP's re-negotiations made over data as examples of 'practical wisdom'.

In our study, confidentiality concerns revolve around the issue of access to data and publication of our analyses, both of which are connected to the issues of ensuring the anonymity of place. Access to various data sources, as suggested above, has not been automatic, but has had to be carefully negotiated, and in some cases has been denied, or partially denied. A useful way of framing this problematic is in a consideration of Foucault's (1980) notion of differential knowledges. According to Foucault, 'knowledge' is multiple and variegated, or in his terms, 'dominant' and 'subjugated'. Certain groups and individuals subscribe to either and as a result are socially positioned in terms of power. The sorts of data or funds of knowledge concerning students, staff and schools R(T)EP seeks to use in its study falls into these two broad categories, and each are imbued with degrees of political sensitivity.

Identifying the degree of political sensitivity of the data to the DET has been a challenge for the university researchers. In this scenario, a key issue for DET officers and DET members of the R(T)EP team was to minimise the likelihood of a breach of confidentiality from their point of view: a key issue for the university researchers was second-guessing the DET view. In addition, this potentially fraught relationship has been, and continues to be, worked out against a backdrop of a range of realities. In our case this included: a NSW state election; the lead up to the negotiation of a new industrial award for teachers; heightened public awareness of education issues through the widened dissemination of the *Report of the Independent Inquiry into Public Education* (Vinson 2002); as well as issues surrounding the development of teaching standards and the establishment of the NSW Institute of Teachers (Totaro 2003; Horin 2003). However, there were more subtle concerns, namely, the critique (and possible criticism) of the DET practices with the potential to sour relations within the team. Ways forward are not easily negotiated when such a partnership involves not only collegiality in working together and the sharing of data but also involves detailed analyses of industry partner practices in the school system it administers.

The higher education literature is not particularly helpful in shedding light on these issues, indicating a range of opinions, from the very positive to at least an admission that university-industry research partnerships can be troubled. An ARC- sponsored investigation into university-industry partnerships suggested that most participants found collaborative research projects a positive experience (Turpin *et al*. 1999). A number of independent investigations, on the other hand, concede at least to some pitfalls for both university researchers and industry partners. These include impediments to the free flow of information, the compromise of academic freedom, conflicts of interest, and undesirable tensions around intellectual property issues (for example, Campbell & Slaughter 1999, Harman & Sherwell 2002, Newberg & Dunn 2002). Most of these investigations examine research partnerships between universities and industry in the broad areas of industry economic profitability or scientific and technological advance. Few, if any, examine partnerships with a specific public service focus. Here, R(T)EP's focus on education as public service rather than an economic interest is relevant. The literature appears to say little about larger system-wide projects involving institutions of the state such as R(T)EP. In addition, these analyses do not dwell on the problematics dealt with in this paper, that is, the tensions around partnership collegiality and critique, and the constraints around the ethics of naming place.

It is the sense of partnership that most concerns us in this paper. We have come to the concept of 'critical friend' from the action research literature (eg Brooker, Macpherson & Aspland 1999; Kemmis &McTaggart 1988) as a potential way forward. Woods & Fraser (1995) usefully outline some issues concerning the role of critical friend. These issues, as they suggest, have just as much salience for large-scale systemic collaborations as they do in smaller scale 'teacher in the classroom type' projects. The notion of 'critical friend' captures both a sense of 'forthrightness' and a sense of 'collegiality'. Taken together these require researchers to enter into processes of critique but in a manner that maintains a strong working relationship. These appear necessary in a partnership-based research project for the transformation of NSW rural schooling, both in terms of student learning outcomes and teacher attraction and retention. In the latter stages of the project a transformation of university partner practice, in its role as teacher education provider, will be aimed at. Here the industry partner will assume the role of 'critical friend' in R(T)EP

academics' efforts to make teacher training programs in two NSW universities more responsive to the needs of beginning teachers in rural and remote schools. That is, both industry and university partners have the opportunity, indeed responsibility, to act as critical friend of the other in reforming the preparation and supports for teachers in NSW rural schools.

The issue of the critique of public sector practices relies upon the availability of publicly-available and publicly- funded data. This paper, then, explores the issues of public versus private knowledge and how this impacts upon our research processes and outcomes. It provides the context for us to explore the nature of relationships between partners in the same project where one of the partners owns data central to the project, some of that data being particularly sensitive for our DET partners. We conclude with some ways forward as suggestions for negotiating the ethics and methodology of partners/subject realities.

The University's Gift: Sociological Data Analysis
R(T)EP has identified three main sets of data for its purposes. We consider first the sociological. This particular data set is seen as crucial in a project that has a main focus on 'place' or context in rural schooling. Sociological data obtained from a wide variety of sources provide a rich fund of contextual knowledge about rural communities in which schools are located and alerts research partners to the unique needs of educators and students in each site. These data have been warmly received in Districts. The same data sets also contain funds of knowledge useful in the preparation of teachers who will eventually teach and work in these sites. Sociological data is one way of fleshing out place and we have done so in terms of the eleven Districts, together and separately, and have the ability to do so down, or close to, particular school sites later in the project where needed.

These sociological data sets are wide ranging and to date in our study encompass general longitudinal demographic information concerning rural communities, such as, population, aging, employment sectors, educational background, ethnicity, language use and family composition. Also obtained have been basic community health data, such as, disease/accidental injury trends, suicide, and child health indicators as well as statistics demonstrating crime types and their frequency. An enormous amount of data

has been obtained describing NSW's indigenous population including health, housing, hospitalisation, employment and educational background.

These data sets have been much more readily available compared to student and staffing data (see below). Most material has been sourced from the Australian Bureau of Statistics or from government agency annual reporting made public on the Internet, for example, NSW Public Health (http://www.health.nsw.gov.au), and the Bureau of Crime Statistics and Research (http://www.lawlink.nsw.gov.au/bocsar). There have been some data sources where access has not been forthcoming and which are the subject of on-going negotiations, for example, data from the Department of Community Services and the Department of Juvenile Justice. These two government agencies present only a very broad gloss of their operations in publicly available reports. Requests to these two agencies, for what we see as information relatively low in sensitivity, for example, the general nature and frequency of their case work in rural NSW, have not been met. This has been particularly frustrating when it is considered that possibly more contentious material is available publicly from other agencies. An example of this, from the Bureau of Crime Statistics and Research, enables the public to identify individual communities by postcode with, say, levels of sexual assault associated with that postcode area.

Data sets are not developed, necessarily, for researchers. They do, however, represent rich information if such data are available to the public. We have already pointed to the methodological difficulties of getting access to some agency data, despite the differences in apparent sensitivity. Additionally, in seeking sociological data sets, the problem of uneven agency administrative regions has been highlighted making analysis within Districts and across Districts at best approximate. The administrative areas that much data has been collated under are not aligned making comparisons and mapping of trends difficult. NSW DET, NSW Public Health, Local Government Area,

DOCS areas, and Police Command districts, to name but a few vary in size and location. Some consideration by R(T)EP has been given to making a formal case for standardising the administrative boundaries of many of these government agencies.

The DET Gift: Staffing Data

Because the Project is concerned with the investigation of elements of recruiting, attracting, preparing, retaining and renewing of teachers for and in rural and remote areas of NSW, access to data on various aspects of staffing of schools is essential. Negotiating beyond the in-principle access to Personnel Directorate-owned data (private knowledge) revealed a conundrum about the degree to which the 'private' knowledge held by DET Personnel was going to be allowed to become 'public' by its release to the researchers, and so potentially beyond them. As we have mentioned, even though the NSW DET was a research partner, sub-institutional Directorates required that specific release of data owned by, say, the Personnel Directorate involved formal checks and balances to be established prior to data release.

The sensitivities of the DET lay not so much in the provision of the data to the researchers and their use of it, but in its further use in the public domain These sensitivities were acknowledged by the researchers. Basic protocols were established. Senior officers of the DET required the opportunity to review draft reports from the Project and respond to appropriate use of the data prior to release of the data in such forms as conference papers and formal reports. A collaborative framework for the researchers and DET personnel to further discuss the supply and appropriate usage of this data was also negotiated.

As mentioned above, Personnel Directorate had already signed off on in-principle release of staffing data. At the first formal meeting in November 2002 between two of the research team and three Directorate personnel, an outline of the project and background to the meeting was presented. The meeting discussed elements of a one-page list of possible data required for the study. The researchers explained that the data required would augment and enrich the picture of the situation in each of the Districts and sites in the study. It was emphasised from the research perspective that in acquiring the data a fundamental objective was not only to gain an information

resource for the study but in its utilisation be able to provide further information back to the DET. It was re-argued that the use of the data was of benefit to their operations and was also an element of the partnership agreement of the project. Paradoxically, an initial unfamiliarity with the exact nature of the data on the part of university-based researchers of what was available in Personnel Directorate lead to cautious discussions. A list of categories and sub-categories of data was submitted to the Personnel Manager regarding the specific types of data that would be useful to the R(T)EP project and a written confirmation outlined the actual sets of data that the DET had undertaken responsibility for providing. The issue of how to effect the exchange of data and in what form the data was to be provided was also negotiated

Initial data sets obtained for 1999-2001 included:

- Teacher entitlements and average beginning teacher appointments;
- Age distribution of teachers;
- Age at appointment in districts;
- Length of service in current school;
- Transfers in/out of districts;
- Average number of resignations per year; and
- Total number of beginning teachers in the State.

The data available have since been extended to include 2002 for these areas as well as new data on executive transfers.

In the presentation and use of these data, due consideration has had to be given to the sensitive nature of some elements, for example, the number of resignations, or those places with high turnover of staff. However, at this stage only R(T)EP researchers and key NSW DET personnel, notably District Superintendents, have considered these staffing data and 'permission' to publish has not yet been requested.

Student Outcomes Data

At a meeting prior to the ARC Application being lodged, the Director of the School Accountability and Improvement Directorate indicated the rich range of data that was potentially available to a study such as R(T)EP (R(T)EP 2001). Subsequently, the in-

principle agreement was signed by the Director as part of the R(T)EP application and included the key phrase "assisting in the co-researching of the links between student outcomes, school culture and teacher professional development" (SASA 2001). Such an agreement was necessary since the data R(T)EP wanted were owned by this Directorate. Student and school outcomes data are particularly sensitive as far as the DET are concerned and this is reflected in the public domain. Although data are published in school annual reports and in the Directorate's Annual Report, these data are such that no individual child or school (respectively) can be identified. With regard to the latter, data that might lead to the creation of a league table of schools are particularly sensitive and, as noted above, prohibited in NSW Legislation.

The negotiation of practical access to data was undertaken with School Accountability and Student Assessment Directorate which built on the work of the School Accountability and School Improvement Directorate. There has also been some movement of key Directorate personnel with whom the project personnel have been dealing. Key to these discussions were the handling of two kinds of data: (1) District level data and R(T)EP access to these (District Chief Education Officers had access and needed guidance as they could be co-researchers with R(T)EP in 'District studies'); and (2) across 11 Districts data and its access. Central to the discussions was the notion of confidentiality of place, that is, the portrayal of these data. For the researcher, the negotiations were an opportunity to develop trust. Establishment of a two-phase protocol for handling these data emerged: the protocol was an essential protection for the DET for confidentiality not to be breached, even inadvertently. Data would be analysed and submitted to the Directorate as a 'for DET eyes only text' initially by two districts submitting their reports that could then be used as models. Wider distribution would require a further approval. The across-Districts data would be treated similarly. Making these data public was thus strictly controlled, that is, beyond the normal ethical practices of researchers as embodied in the CSU ethics approval. DET personnel sensitivities were clearly heightened during these negotiations because of the impending State election. It would be naïve not to take these contextual circumstances into consideration..

In the ARC Linkage proposal, R(T)EP wanted to map various statistics, including their possible graphic display and we have done so. An aim of the Project was to

develop a spatial map of educational achievement in rural and remote new South Wales with specific regard to public education. The data was not seen as simply 'instrumental' (e.g. as a means to identify sites) but also as problematic and symptomatic. However, in relation to student outcomes data, specific cases were identified in the negotiations about the kinds of data that could be used in the across District studies. The tantalising opportunity to display student outcomes data across eleven districts highlighted the impossibility of being able to use data in this way. In effect, mapping school-related data enabled individual schools to be identified and an agreement was reached to abandon this form of data presentation. However, the NSW DET database is extensive, and has been collected over time. Considerable and useful data has been negotiated which includes raw and gain scores in key subjects in primary and secondary sectors, amongst others. Such data will be able to be presented across our eleven Districts, and in relation to non rural and remote categories. In relation to data at sites 'interesting' to R(T)EP, potential exists for data on specific schools to be accessed but there is a clear understanding that these kinds of specific data are for researcher understanding of particular sites and *not* for publication. Specifically, league tables of any sort are *not* to be published. Here we have a direct contrast in approach to the issue of public and private knowledge as compared to the UK with the introduction of the *Comprehensive Performance Assessment* for schools (see, for example, Parker 2003). League tables seem to be associated with a certain kind of accountability and a conservative politics. The NSW Teachers Federation have long been opposed to 'league tables' which do not take into account a range of context-related variables and which have the potential to ridicule the sincere efforts of teachers (see, for example, Yaman 2002).

Public Data: Public Knowledge?

As can be seen, R(T)EP needed data that was owned by parts of the NSW Department of Education and Training (DET) as the industry partner. In addition to the university ethics clearance process, multiple agreements were reached (or attempted) concerning access and publication of data that was not public. In the case of the DET, R(T)EP needed data that was owned by parts of the institution. Some of these data are sensitive. Central to this sensitivity was confidentiality associated with place. In the DET, previous experience when data had been published had heightened sensitivities and the backlash against the DET and politicians had been felt. Data owners were

acting to ensure privacy but also to minimise embarrassment to the DET and also to the government of the day. This is a fraught area. A scenario can be imagined where such data need to be published in the public interest.

Researchers know that obtaining and publishing data requires sensitivity. This study highlights that such sensitivity goes beyond sensitivity to individual rights but is extended to institutions that have gathered sensitive data and to which researchers desire access. In this situation, being a critical friend is important. Critique can be more robust in private (eg, reports for DET 'eyes only' or in discussion of the meanings of sensitive data for the purposes of improvement, say, in particular schools). There is a trust by DET officers that data will not be used to injure, either the individual, or the DET, or the government of the day to which the bureaucracy is responsible. Researchers have the responsibility to develop trust by articulating high standards of research ethics being ascribed to in the study. The protocols make a slide into lack of confidentiality less likely and so act as a kind of insurance mechanism. Negotiating such a technology could be seen by researchers as a lack of trust, but critical friendship demands reciprocity and it was evident that protocols were a useful way forward in handling a difficult problem. Significantly it is the Universities as well as the industry partner that is requiring the development of negotiated, transparent and agreed upon protocols.

There is also a practical wisdom in agreeing to the protocols. R(T)EP researchers needed the data and the data were owned by others. Agreeing to the protocols assisted in gaining access. Thus, in the first instance, the researcher has the responsibility to write the research output with an understanding of data owners' sensitivities which may be the same as, or greater than, the sensitivities covered by an ethics approval. Not all data can be placed into a report. The notion of audience has always been central to any writing..

In conclusion, the relationship has developed in positive ways but remains complex. We are learning from it. Going into this major study, many of us would not have foreseen that such careful negotiations would be required. Our understanding of our partners' sensitivities and responsibilities have increased markedly such that we can work within a range of checks and balances that ensure our access to data that are

essential to our project. This is helping us to build the trust in relationships upon which we continue to work. The issue of public and private knowledge is clearly one of interest. Associated with this issue is that of ownership of data about the public by a public department. Where publication of such data infringes upon the rights of the individual, then these data can reasonably be withheld, but data withheld for the protection of a department or a politician is far more problematic. Fortunately for us as university researchers we have not as yet had to address this problem in our roles as critical friends of a public educational provider.

Postscript:

Industry and University members of R(T)EP commented upon this paper.

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