River literacies: Researching in contradictory spaces of cross-disciplinarity and normativity

HELEN NIXON, BARBARA COMBER AND PHIL CORMACK Centre for Studies in Literacy, Policy and Learning Cultures, Hawke Research Institute, University of South Australia

ABSTRACT: The educational research and policy scene in Australia over the past decade has featured a number of contradictory developments. National policy has sponsored more interdisciplinary and applied research, while moving down a Research Quality Framework pathway which prioritises measurable quality and impact measures. At the same time, recent international and national policies in literacy education have been dominated by a psychological (rather than socio-cultural) view of literacy, wrapped within a discourse that valorises "evidence-based" practice. As literacy researchers coming from an ethnographic, collaborative and critical tradition, we have had to be strategic to secure funding to continue our research agenda in innovative, ethical and scholarly ways. This paper uses the case of a recent research project to explore some of the ways in which our approaches have been contradictorily positioned within this policy context.

KEYWORDS: Literacy policy; research policy; collaborative research; interdisciplinary research.

INTRODUCTION

The phrase "river literacies", as thematised in our title, signals the alignment of our research with socio-cultural approaches to literacy education often known as the New Literacy Studies (Gee, 2000; Street, 2001), which place a particular emphasis on the situatedness of literacy practices (Barton & Hamilton, 2000). Whilst our research mostly focuses on school-situated literate practices, we take a similar approach to investigating what constitutes literacy in particular places, communities, schools and classrooms at particular times. "River Literacies" is the short title of a research study which explores literacy curriculum and teaching in an environmental communications project located in the Murray-Darling Basin bio-region of Australia. Our research also has a long tradition of collaborative action research, in which we have sought to work with teachers, negotiating curriculum, informing policy, making knowledge, and adapting practice in the tradition of Garth Boomer's "pragmatic radical" (Boomer, 1999; Comber, 2006; Green, 1999), working to redress inequities. These informing traditions stress particularity, place and cooperation – the specificity of research practices and knowledge production with particular people – and have been the hallmarks of our work.

Yet increasingly we are aware that there is a new game in educational research in Australia and beyond. This paper may just as easily have been sub-titled *the move to metrics, the return to the old basics, commonsense fights back*, or any number of catch-cries which evoke the political and media rhetoric of the contemporary era. In Australia, research conducted by university researchers is to be evaluated through a

federal government Research Quality Framework (RQF)¹ through which research funding will be divided. We have no wish here to anticipate the worst, nor to highlight the paranoia felt by many university academics at this time. However, we do wish to note that we are working in times of increasing contradiction, where it is not longer obvious how to advise young teachers or to mentor early career researchers. It is not simply a matter of inducting the next generation of educational researchers into the games we learnt to play, albeit ethically motivated. We are now, it seems, in a very strange policy space that wants both to open up research (using calls for cross-disciplinarity and innovation), and also to close it down (by indicating that only certain kinds of "scientific" research counts).

In this paper we explore some of the contemporary challenges and contradictions facing English literacy education researchers through an analysis of our recent experience in one research project in the context of changing educational policy and practice. We begin by briefly describing the current research policy scene, particularly the federal government's research priorities and the calls for cross-disciplinary research. We then turn to the trend towards normativity and scientific research-based evidence in literacy policy, focusing on similarities between the US and Australia. Having established the contradictory spaces of cross-disciplinarity and normativity in which we are working, we then introduce our research program, and finally the River Literacies Project as a particular instance of our research practice at this time. After outlining the aims and design of the River Literacies study², we examine how the politics of research played out when we decided to report on this study for a special issue of a major Australian literacy education research journal. Our intention is to illustrate just how complex and fraught it seems to be right now to engage in ethically driven, cross-disciplinary literacy education research with teachers.

NATIONAL RESEARCH PRIORITIES IN AUSTRALIA

In Australia, the Department of Education, Science and Training (DEST) is "the Commonwealth Government's principal agency for policy formulation and advice on matters relating to education, science and training" (Commonwealth of Australia, DEST, 2005). DEST itself funds research projects and, through its national research priorities, also has a direct impact on the kinds of research projects that are funded by other bodies. For example, applications for funding made to the Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC), two key sources of research funding in the higher education sector, are assessed by peer review and panels of experts in part according to how far they are likely to meet the national research priorities set down by DEST in 2002.

¹ At the time of writing, a new Federal Labour Government has been elected in Australia and this is now expected to both alter and delay the introduction of the Research Quality Framework.

² River Literacies is the plain language title for "Literacy and the environment: A situated study of multi-mediated literacy, sustainability, local knowledges and educational change", an Australian Research Council (ARC) Linkage project (No. LP0455537) between academic researchers at the University of South Australia and Charles Sturt University, and The Primary English Teaching Association (PETA), as the Industry Partner. Chief Investigators are Barbara Comber, Phil Cormack, Bill Green, Helen Nixon and Jo-Anne Reid.

Acknowledged to be "aspirational", and intended to "help deliver the kind of future we want", the national research priorities are:

- An Environmentally Sustainable Australia;
- Promoting and Maintaining Good Health;
- Frontier Technologies for Building and Transforming Australian Industries;
- Safeguarding Australia (Commonwealth of Australia, DEST, 2005, "National research priorities Overview", paragraph 3).

Although these priorities are described as "broadly based, thematic and multidisciplinary in nature" (Commonwealth of Australia, 2005b, paragraph 1), none is an obvious match for research proposals from the social sciences and humanities in which educational research is often located. This was acknowledged by DEST which, in 2003, "enhanced the priority goals" that underpinned the national research priorities "to strengthen the contributions of social sciences and humanities research" (Commonwealth of Australia, DEST, 2007a, "National research priority implementation plans", paragraph 5). Since then, two goals of the second national priority, Promoting and Maintaining Good Health, in particular have been cited in research proposals put forward by educational researchers: "a healthy start to life" and "strengthening Australia's social and economic fabric". As we will go on to explain, we also have had some success designing educational research projects in the field of literacy education that address the first national priority, An Environmentally Sustainable Australia. Nonetheless, educational research in general has become increasingly difficult to design and justify within the narrowly framed national priorities, and has consequently been difficult to fund using current nationally competitive funding processes.

ENCOURAGING CROSS-DISCIPLINARY RESEARCH IN AUSTRALIAN HIGHER EDUCATION

A second point to note about the national research priorities is the emphasis that has been placed by government policy makers on research that is undertaken in *cross-disciplinary* teams of researchers, who work in different organisations, states and countries. One stated purpose of the national priorities is to "provide a catalyst for the formation of teams and networks of researchers across many disciplines in Australia and internationally" (Commonwealth of Australia, DEST, 2007b, "National research priorities standing committee. Terms of reference", paragraph 2). Because of the significance of DEST in relation to higher education funding, the push by DEST to encourage broadly based, thematic, multidisciplinary and collaborative research has been taken up by universities across Australia, and this has brought with it added levels of complexity for the design, funding and implementation of research proposals.

A significant national context for our research has been the push, at a number of levels, for research to be connected to "practical" problems relevant to industries and society more generally. Our university is a member of the Australian Technology Network (ATN) of universities, which seek to distinguish themselves through offering "research in partnership with industry and the professions which has an impact and makes a difference in the communities within which we operate" (ATN, 2004). This

push has emphasised applied research, with industry partners, which increasingly brings together insights from a range of disciplines around problems that require complex social, scientific and cultural responses.

The focus on cross-disciplinarity has also been encouraged nationally through the peak Australian research funding body – the Australian Research Council (ARC) – which, for example, in 2004 funded research networks which aimed to "encourage more inter-disciplinary approaches to research; and facilitate collaborative and innovative approaches to planning and undertaking research" (Commonwealth of Australia, ARC, 2004, p. 6). As a result of this push, the authors participated in a venture which sought to combine researchers from the sciences, humanities and social sciences in a national research network around the concept of "eco-social sustainability" (University of South Australia, 2004, "Eco-social sustainability in the Murray-Darling Basin research network", paragraph 1) to respond to the failure of science alone, to adequately build effective, socially just and sustainable responses to the environmental crises facing river systems in Australia. This work was conducted at the same time as the education research centre within which we were located, was folded into a larger research Institute, focused on sustainable societies, which also emphasised cross-disciplinary research as its core business.

This effort of re-imagining our work as members of cross-disciplinary teams was not without its false starts and problems. There was the difficulty of organising large research teams and negotiating the ways in which problems and goals for research might be stated. For example, in one set of negotiations with a group of demographers around the potential for collaboration on issues of eco-social sustainability, we found that they had trouble even *hearing* our concern for issues of representation and communication as being connected to their own research into populations. Having other researchers understand the kinds of work involved in socially oriented research was also a difficulty, as different practices, timelines and budgets needed negotiation. There were no readily available models or guides on how to manage and run such programs of research.

LITERACY POLICY AND RESEARCH: THE WORLD-WIDE PUSH FOR SCIENTIFIC EVIDENCE

In relation to our specific academic fields of literacy studies and literacy education, the last decade of conservative federal government in Australia has seen a dramatic increase in the demand for so-called, evidence-based literacy policy. While qualitative research in Australian literacy education in the eighties and nineties enjoyed significant research funding through the Labor federal government's National Children's Literacy Projects, through a competitive tendering and selection process, in the last decade there has been a significant shift towards commissioned research, and a great deal of government policy, funding and rhetoric privileges quantitative and psychological approaches to literacy (see Cambourne, 2006; Comber & Cormack, 2007; Doecke, Howie & Sawyer, 2006). This, as Delandshere (2006) points out, is part of a global market ideology impacting upon what constitutes educational research at this time. The retrospective application of new criteria for what constitutes scientific research and quality publications has resulted in the obliteration, or at least the marginalisation, of many significant socio-culturally informed studies of literacy education (Delandshere, 2006), including studies that are undertaken in collaborative

partnerships between universities and schools and which use methods in keeping with forms of action research and practitioner inquiry (Groundwater-Smith & Mockler, 2006).

In the United States, new federal policy interventions and associated funded programs such as *No Child Left Behind* (NCLB) and *Reading First* are explicitly aligned with so-called "scientifically-based" research findings about *what works* (Cochran-Smith & Lytle, 2006; Delandshere, 2006). The "What Works Clearinghouse" unproblematically asserts that:

In order to meet the evidence standards..., a study has to be a randomised controlled trial or a quasi-experiment with one of the following three designs: quasi-experiment with equating, regression discontinuity designs, or single case designs.

(US Department of Education, September 2006, "What Works Clearinghouse evidence standards for reviewing studies", p. 5)

This push for a particular version of science and evidence has been aligned with other policies whereby governments only promote research using these criteria, and funding for educational interventions in turn is contingent on such research approaches (Cochran-Smith & Lytle, 2006; Delandshere, 2006). In the US context, Cochran-Smith and Lytle (2006) note:

- 1) the invective employed to critique non-supporters of NCLB;
- 2) the unprecedented entry of the federal government into educational matters formerly handled by states and districts;
- 3) the assumption that knowledge of techniques of effective teaching can be identified (by certain prescribed forms of so-called scientific research) and universally applied by teachers.

In Australia, the recent *National inquiry into the teaching of literacy* echoes many of the assertions made by *No child left behind*; indeed there are strong similarities in the informing ideologies, the conceptions of reading and teacher effectiveness, and the prevailing view of what is considered scientific research. The report of the inquiry, chaired by Dr Ken Rowe, includes few references to studies that had been funded under the previous federal Labour Government, either via the DEST-funded National Children's Literacy Projects, or through those funded under the Australian Research Council's Linkage or Discovery Programs, or indeed to international studies. The most frequently cited studies were those conducted by the chairperson himself and his colleagues; further, many of the cited studies were not about literacy at all.

Quite apart from the self-referential and exclusionary nature of these practices, what is of greater concern are the possible long-term effects for teachers. In an earlier analysis of this report, we argued that:

Overall, there is a strong emphasis on the teacher as an object of policy and as a target of information. The teacher is an empty receptacle needing to be filled with knowledge and skill. Indeed, a teacher rarely thinks for him or herself except in the most limited ways. The logic is that the teacher should have a prepared range of strategies for teaching reading. The teacher will then use information from assessment/diagnostic tests (once again pre-prepared) to *select* from that range the most appropriate one to apply in the situation. The teacher is positioned in a similar way to a computer user who

is provided with a menu of possible actions by a software program – they select and apply the appropriate menu choice (Comber & Cormack, 2007, pp. 100-101).

There is a striking similarity between our analysis of this national report and Cochran-Smith and Lytle's (2006) notion of the "troubling images of teaching" in *No child left behind*, where teachers "are to be prudent consumers of the reservoir of resources for instructional decision-making that can be found in products created by experts in the field and certified by SBR [scientifically based research]" (Cochran-Smith & Lytle, 2006, p. 678). One of the most confronting challenges of contemporary educational times is the combined dominance of "global market ideologies" (Delandshere, 2006) which translate teaching into products and commodities for sale, along with a managerialist and accountability agenda evident in "translocal texts" (Smith, 2005, p. 103), such as standardised tests that measure performance in their own narrow terms. When teachers are positioned as mere technicians, their knowledge is hardly going to be seen as credible.

Given these overlapping policy contexts, how does a team of researchers, committed to literacy education for social justice, ethically position themselves in these times? In this policy milieu, how could we continue to pursue our inquiries in ways that were innovative, had impact and were of sufficient quality to attract funding? Where and how should we publish our work? Would our publications with and for teachers count?

A PROGRAM OF RESEARCH ON LITERACY AND SOCIAL JUSTICE AT THE UNIVERSITY OF SOUTH AUSTRALIA

For well over a decade, researchers at the Centre for Studies in Literacy Policy and Learning Cultures (formerly the Language and Literacy Research Centre) within the Hawke Research Institute for Sustainable Societies at the University of South Australia, have developed collaborative and critical approaches to investigating literacy education policies, practices and effects. Research methodologies include ethnography, critical policy analysis, genealogy, collaborative action research and longitudinal case studies (incorporating qualitative and quantitative data). As our website notes:

Centre researchers are developing new forms of socially responsible, change-oriented, advocacy research and development programs predicated on the principles of participation and equity. We work collaboratively with young people, educational workers, parents/caregivers/families, teachers, administrators and policy makers. All Centre members share a research interest in, and conduct professional development with, the education profession (Hawke Research Institute for Sustainable Societies, 2007, "The research agenda", paragraph 1).

Our research program is designed to foster collaborative inquiries of various kinds with educational practitioners, students and communities in ways which might work as a positive catalyst to equitable reform (for example, Comber & Nixon, 2005; Comber, Cormack & O'Brien, 2001; Comber, Nixon & Reid, 2007; Cormack & Nichols 2001; Nixon & Comber, 1995), and actively work against research which, Delandshere (2006, p. 77) notes, is unethical because it "maintains people in conditions of subordination". Our research is both collaborative and critical —

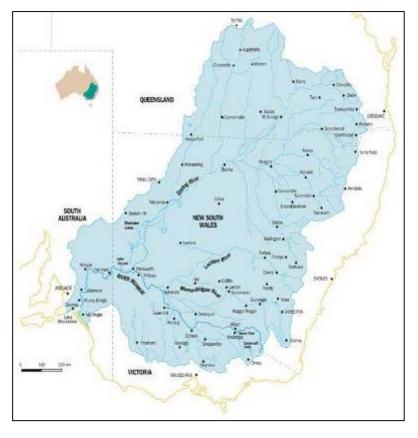
collaborative in that, wherever possible, we seek to research with teachers and students, rather than making them the objects of study; yet critical in that we explicitly seek to identify power relations and differential effects of schooling practices, which might limit the educative potential of schooling, or even reproduce inequities.

This tradition of researching with teachers, and working to reposition them as knowledge producers, may be hard to sustain in these times. However, the project we discuss here does make this attempt. In the remainder of the paper we examine how and why we strive to maintain these ways of working, and the challenges we grapple with along the way, illustrated with particular reference to the River Literacies project.

THE CASE OF ONE PROJECT: BRINGING TOGETHER LITERACY AND ENVIRONMENTAL STUDIES

The River Literacies Project is presented here as an example of research that can be seen as a response to the various contextual and historical factors discussed in the first part of the paper. It is cross-disciplinary and brings together two separate fields of research – literacy studies and environmental education – as well as being a complex project involving collaborative research with educational practitioners.

Since 1993. the Primary **English** Teaching Association (PETA), the Industry Partner in the River Literacies Project, has been responsible for the Forever Special program. Special Forever is conducted in collaboration with the Murray-Darling Basin Commission (MDBC) involves 400 primary schools from across the Basin. The Murray-Darling Basin is a water catchment of global significance and Australia's most important agricultural region. It is also severely degraded and



faces an uncertain future - a future made even more troubling by global warming. Annually, approximately 20,000 students engage in environmental communications work on their region in the *Special Forever* program. The program has produced integrated work-plans across curriculum areas and engaged students in producing arts

and print-based responses to the environment. The program has been hugely successful in providing authentic contexts for student literacy and representational work and has produced high-quality publications of that material in an annual anthology. It is around this program of work that our River Literacies study was built.

The River Literacies Project was designed to add an explicit research component to the work of *Special Forever*, with the aim of extending and improving the quality and range of literacy and environmental teaching that occurs. Our Industry Partner, PETA, was keen for the program to engage students in literacy practices which move beyond observation and celebration of the environment towards a critical engagement with the social and environmental challenges facing the Murray-Darling Basin (MDB). Thus the project brought together two fields of study, literacy studies and environmental education, in a way and to a degree that in fact is rarely done.

In relation to environmental education, with the exception of the work of Andrew Stables (see for example Stables & Bishop, 2001), that field has not paid systematic attention to literacy, nor has it attended to the related notions of textuality and textual practice as resources for environmental learning. Where literacy has been utilised as a term, it has usually been within the frame of "environmental literacy" or more broadly "scientific literacy", which in fact we see as problematic because they tend to focus on literacy as "information" rather than addressing its textual and communicative elements. Our concern within the River Literacies Project was with the environment as an *object* of literacy to consider, for example, the literacy challenges associated with developing what has been called "environmental agency" (Lane, Lucas, Vanclay, Henry, Wills & Coates, 2005), particularly in children and young people, and in building environmental knowledge that is personally and socially meaningful to people living in particular places.

Project design and funding

Not only did the River Literacies Project bring together two fields that are not often related; it also sought to do this in a particular field of practice: primary school teaching. A significant challenge here was how to develop the environmental knowledge and skills of primary school teachers. Often, primary teachers are neither trained nor encouraged to see environmental issues as core to their work — even though the primary school must be regarded as a key site for the education of the next generation of people who will live in the MDB.

We therefore designed a project which was both cross-disciplinary – combining literacy studies and environmental education – and aimed at engaging with practice and practitioners. These two dimensions – the cross-disciplinary and the practical or practice-oriented – meant that the project design was complex and fluid, allowing for negotiation between fields of knowledge and practice. The Project had two main goals:

- 1. To critically analyse the knowledges and pedagogies related to literacy and the environment that have been developed through the *Special Forever* program to date, as exemplified in the materials already produced in the program;
- 2. To investigate how primary teachers design curriculum and pedagogies which engage students in developing critical knowledge about the environment and

the skills for communicating this knowledge using an expanded repertoire of literacy practices including the production of multimedia and multimodal texts.

In order to meet these goals, we designed the project in three phases:

- Phase 1 involved a retrospective analysis of all the work that had been produced in *Special Forever* in the (then) twelve years leading up to the research study in order to consider how literacy and the environment had been brought together in the work of classrooms, as evidenced by materials included in the anthologies of work published each year. At the same time we reviewed with the regional coordinators and other teachers in *Special Forever*, the resources, classroom practices and units of work that they had typically used in developing such texts;
- Phase 2 involved working with regional coordinator-teachers in *Special Forever* to review insights from Phase 1, and to provide input and professional development around literacy, particularly multimodal and critical literacies, and environmental education;
- Phase 3 involved volunteer *Special Forever* regional coordinator-teachers conducting action research in their classrooms which took up ideas from Phase 2, and continuing their professional development in an inquiry group. Case studies of eight of these teachers' classrooms were co-produced by teachers and university researchers.

In many ways, the Project aims were novel in that they brought together an innovative and distinctive sense of the MDB, conceived both as an *object of knowledge*, and a distinctive *object of literacy*. The study sought to bring to teachers and the curriculum a heightened theoretical and practical understanding of the nature and importance of multimodal literacy, fully embracing new notions of knowledge, textuality, language and digital media. It also drew innovatively on the methodologies of discourse analysis and social cartography, as well as those associated with practitioner action research and fieldwork-based observation.

We decided to apply to the Australian Research Council (ARC) Linkage Grant Scheme to undertake this study of a long-term environmental communications project, because it built on our previous work in critical literacy, critical discourse analysis and collaborative action research, as well as a history of collaborative inquiry among team members. It also provided an unprecedented opportunity for us as literacy education researchers to nominate our research in one of the national priorities for research funding which, as we have shown, are dominated by non-social science and humanities disciplines. The ARC-nominated assessors welcomed our cross-disciplinary approach and saw it as innovative in the ways that we proposed to work with teachers using various forms of communications and collaboration. One assessor did question whether the research design would allow us to say anything about the Project's effects on students' learning, signalling – though not demanding – the need for evidence of impact. We were able to address this concern by pointing to our analysis of the twelve-year archive of student work in Special Forever as a benchmark and also to the strategic use of action research and case studies. Clearly we had done sufficiently well in arguing for the significance and innovation of the Project and the national benefit in terms of the research location in the environmental

sustainability priority. In any case the Project, along with a very modest budget, was funded by the Australian Research Council, giving us the chance to explore new territory even as we worked within our existing domains of scholarship as literacy educators.

CHALLENGES OF DISSEMINATION FOR AN INTERDISCIPLINARY STUDY

So far in this paper we have pointed to some of the ways in which policy-makers and funding bodies act as gatekeepers to what counts as research in national contexts, to what counts as worthwhile *educational* research, and to what counts as research in the fields of *literacy* studies and *literacy* education. We have also illustrated these processes at work in relation to our own Australian context as university researchers and in relation to a specific research study that we are now completing on the topic of literacy and the environment. We now turn to some of the specific difficulties we face as we begin to *disseminate* the findings of a study that has been assessed by its funding body as "innovative" and "interdisciplinary", taking the publication of a special issue of a literacy journal as a case. We emphasise that our discussion of this process is not a criticism of the editors or reviewers of the journal; rather it is an exploration of the challenges facing academics and research practitioners in adequately accounting for cross-disciplinary and collaborative research that is outside the norm.

Firstly, where should we publish papers about a study of literacy and the environment? Our publication plan for the River Literacies Project includes the production of several scholarly articles for an academic audience; an edited book for academic and teacher audiences which focuses on the teacher case-studies; a coauthored book for an academic audience; and an edited special issue of a research journal. We were especially keen to produce a special issue for a journal in our core academic field of literacy education for two reasons. Firstly, the study aims to produce applied knowledge for the profession of English/literacy teachers, and a special issue would allow each researcher in the team to publish on an aspect of the Project within their particular sub-field of interest (for example, literacy and new communications media; literacy and teacher identity) as it relates to our study of the Special Forever program. Secondly, it would allow us to do justice to what is an expansive and multi-layered collaborative project that includes text and discourse analysis of a significant corpus of data, teacher professional learning about literacy and environmental education, and teacher inquiries undertaken in educational contexts across a number of states and territories of Australia.

In Australia, the most significant journal devoted to this kind of work is the *Australian Journal of Language and Literacy* (AJLL) published by the Australian Literacy Educators' Association (ALEA):

The uniqueness of the AJLL lies in its ability to meet the needs of both classroom teachers and academics by providing clear links between theory, research and practice. The editors of AJLL aim to:

- provide balanced and in-depth investigation of literacy practices and theories in everyday settings, including classrooms;
- enhance understanding of literacy issues in relation to their wider educational and social contexts;
- help readers keep abreast of current literacy research;
- examine current research with a view as to how it might be implemented for classroom teachers;
- encourage the identity of classroom teachers as researchers;
- provide a forum in which literacy professionals from all settings can exchange and discuss ideas and practices relevant to their work (ALEA, 2006, opening paragraph).

In our view there was a close fit between the goals of the journal, the nature of our River Literacies Project, and the kinds of publications we wanted to produce and audiences we wanted to reach. Firstly, we had been "investigating literacy practices and theories in everyday settings, including classrooms", but also in non-traditional places such as parks and gardens and other outdoor settings, and built as well as natural environments. Our concern was to focus on the environment as an object of literacy. Secondly, we shared the journal's objectives of trying to develop our own and others' "understandings of literacy issues in relation to their wider educational and social contexts" by bringing together a focus on literacy with a focus on the environment, with specific regard for the Murray-Darling Basin. Thirdly, in several of the papers we report on the ways in which we had been "encouraging the identity of classroom teachers as researchers" into children's learning and communication practices in relation to their immediate and wider environments.

The research team accordingly produced and submitted for review four papers³ that were eventually published as a special issue (*AJLL*, Vol 30, No 2, 2007): an Introduction⁴ which outlined the Project (see Green, Cormack & Nixon, 2007)⁵, and four single or joint-authored articles that focussed on:

Paper 1. Discourses about, and representations of, the environment evident in children's published contributions to the *Special Forever* program, especially in work categorised by us as "Literary-English" (see Green & Cormack, 2007);

Paper 2. The expanded semiotic repertoire that was engaged with, and developed by, students in the classroom of one teacher-researcher who worked with the concept of "multimodal discourse" (Kress & van Leeuwen, 2001) and the modes and media of contemporary communication (see Nixon, 2007);

³ We invited Margaret Somerville (2007) to contribute a fifth paper for consideration for the Special Issue because her work has been extremely helpful to our thinking in the new territory of place pedagogies.

⁴ We hoped that our Introduction would explain the design of the project and contextualise each of the papers that followed so that the collection of papers, taken as a whole, would highlight what the ARC assessors of the original research proposal had called its "novel" and "innovative" approach to a problem using a collaborative, cross-disciplinary, and multi-faceted research design in that each individual paper reported on one particular facet of the study.

⁵ In the print version of this issue of the journal our "Introduction: Literacy, place, environment", which followed the editorial introduction, was wrongly attributed to the general editors of the journal, L. Unsworth, C. Buckland, D. Baxter and B. Croker.

Paper 3. The concept of "pedagogy of responsibility" (Martusewicz & Edmundson, 2005), developed within environmental education, and its take-up by participating teachers in pedagogical practice that linked literacy and the environment (see Reid, 2007);

Paper 4. The relationship between literacy, place and teacher identity as they intersect around the *Special Forever* professional learning program (see Kerkham & Comber, 2007).

Despite the apparent fit of our goals and those of the journal, the fact that the study was multi-faceted, and brought together studies of literacy and environment, caused some difficulties for us as writers and also for some of our colleagues in the field who acted as peer-reviewers of individual papers. In the case of cross-disciplinary research, there is always the risk that – during both the funding and peer-reviewing processes of research dissemination – reviewers will bring to a study a particular lens and, in effect, serve to police disciplinary boundaries rather than appreciate, or even acknowledge, what is actually being attempted. Reviewers quite understandably bring to the process certain sets of expectations based on their own traditions and expertise in a field or discipline.

With specific regard to literacy studies, different papers in our special issue collection were assessed as having more or less to say about literacy, and therefore being more or less in accord with the goals of the journal. One paper was judged to deal with "an important aspect of literacy practice in the context of environmental education in the primary school" and was therefore thought to be relevant to the journal. A second paper was judged to be "commensurate with the aims, orientations and readers of the Australian Journal of Language and Literacy" and to make "important contributions to the fields of literacy education and environmental education". In contrast, a reviewer of Paper 4, which focused on the relationship between literacy, place and teacher identity, assessed that "issues of 'language and literacy' are fairly marginal to the paper and therefore would need to be strengthened in focus for publication in this journal". The point here is that the expectations of some reviewers were confounded when they read a paper about that facet of our study which investigated what it means for literacy teachers working in rural localities to prioritise "place" as an important personal and professional concept, and to work with place-based pedagogies that incorporated literacy practices for representation and communication. Theoretically, the study works with a concept of place as *relational*, and as "relationally performed" (Watson, 2003). Further, we attempt to think together aspects of teachers' identities as both literacy teachers and teachers of place-based environmental education. This is complex terrain, even for the teachers and researchers involved, and it is not surprising that it rubbed up against some reviewers' expectations of what "counts" as literacy research.

As we have made clear, in River Literacies we were also attempting to bring studies of the environment into the purview of the field of literacy studies. Accordingly, in order not to lay ourselves open to the charge of superficiality, we needed to cover appropriate amounts of the literature in both areas. However, when producing academic papers about a multi-faceted study, it is always difficult to know what to cover and what to leave out, especially when the writer needs to cover more than one discipline or field. Similarly, peer-reviewers of cross-disciplinary research proposals and papers are likely to have different views on what should be covered, depending

on how they are positioned *vis-à-vis* one contributing discipline or another. In the case of our special issue, for example, while Paper 4 was criticised for not being clearly enough *about literacy*, Papers 2 and 3 were criticised for not making enough reference to literature in the field of *environmental education* – something which was, in our research, being *brought together* with the field of literacy studies, but not as the main *focus* of either the study or of the papers under review.

A third example taken from the dissemination of our research suggests that, even when researchers and reviewers clearly operate within a shared field of study or discipline, and use a common methodology in their research in that field, what "counts" as research may still be up for debate. For example, our use in Phase 1 of the methodology and methods of critical discourse analysis (CDA) to examine the archival materials produced by PETA for the Special Forever program, and exemplified in Paper 1 of the special issue, came under particular scrutiny. One reviewer, who described the paper as a "scholarly contribution to identifying connections between Literacy-English and environmental communications in children's texts", nonetheless criticised it for not being "the exhaustive linguistically oriented and socially critical analytical method that properly constitutes CDA" (our emphasis). That is, rather than acknowledge that critical discourse studies is an emergent and contested field (for example, Fairclough, Graham, Lemke & Wodak, 2004), the judgements of some peer-reviewer researchers in literacy studies (as in other fields) serve to establish and police the boundaries of particular approaches to research in the field.

A final example of the contested nature of what counts as literacy research in our times is taken from reviews of Paper 2. This paper drew on the practitioner-inquiry and action-research phase of the project to discuss how one teacher inquired into what happened when she consciously tried to incorporate understandings of multimodal literacies into her primary students' studies of the local environment. In this case, the author was criticised for the "limited justification [is] provided in respect to what this model of multimodal literacy offers (i) teachers and (ii) primary students". This reviewer was concerned that:

the writer does not expand on a pedagogic justification for the use of multimodal literacies in terms of how this builds and enhances students' understandings about the environment and the teachers' capacities to facilitate their students' learning/understanding.

In our view, this criticism fails to appreciate that this was precisely what the teacher was attempting to *investigate* in her practitioner inquiry. That is, she was not applying pre-existing and prior-tested pedagogies using methods devised by others. Rather, she was working in the spirit of the study by using inquiry and action-research cycles to *explore* the ways in which the use of multimodal literacies, as she understood and translated this into her curriculum and pedagogy, did "build and enhance[s] students' understandings about the environment and the teachers' capacities to facilitate their students' learning/understanding", *or did not*. In short, this reviewer, concerned that "the impact of this [teacher's] prior knowledge and experience on the aims and outcomes of the research has not been explored", has wrongly assumed that the study used an experimental design that was "testing" something that was already known, and could "control for" the variable of teacher prior-knowledge. Such comments

signal to the field of literacy studies that practitioner-inquiry and action research approaches do not count as valued research in these times and, in turn, they cast doubt on the validity and value of university-school collaborations in the research endeavour.

Taken together, the collection of papers we submitted presented difficulties for us as writers, and for our peers as reviewers, that are indicative of the wider challenges facing interdisciplinary and collaborative research in the current climate. When multi-and cross-disciplinary studies are read from within the frame of a single discipline, there is a danger that the study will be perceived as under-developed in that field. The need to cover a range of territories necessarily dilutes the focus on one and, given the word limits for publications, this means that the study might seem to some readers to be inadequately theorised, framed or explained. Such responses are based on a zero-sum approach, where attention taken away from the discipline is seen to dilute the research rather than enriching it by connecting it to other fields.

A second difficulty is the way in which research which is innovative or *exploratory* in nature can easily be cast as insufficiently accounting for different factors that might contribute to the outcomes. In other words, the focus on scientific approaches and, especially, on the control of variables, means that projects which are open to complexity can be seen as inadequately designed and not able to come to clear conclusions about cause and effect. Another way of conceiving of this tendency is to see scientifically-based research as having a streamlining effect on research design, where those very aspects which are most in need of exploration are stripped out because they do not allow an easy link between input and output. A similar point might be made for collaborative studies, undertaken in partnerships between university- and teacher-researchers, where involving the issues and questions of practitioners complicates the focus and the outcomes of the research

WHAT RESEARCH COUNTS IN AND FOR THE CLASSROOM?

The scholarly community is not the only site where research is evaluated and its veracity determined. Increasingly there is evidence that, in policy and curriculum environments, only some research counts. Smith (2004, pp. 43-47) notes that, in some policy contexts, curriculum and schooling experts are deliberately excluded when deciding curriculum and assessment goals and practices. We have also noted how "evidence-based" rhetoric can be seen as a strategy for ruling out of the policy equation findings from some forms of inquiry – those that don't meet an arbitrary "gold standard" (Comber & Cormack, 2007). We see this "evidence-based" discourse not as representing a dispassionate commitment to evidence; rather, it represents a struggle over definitions of science, reading and learning, enabling the winners to eliminate entire bodies of evidence despite their demonstrated utility (Shannon, 2007, p. 461)

However, we argue that there is another important context where research is evaluated as counting – and that is the context of practice. There is no necessary linkage between policy pronouncements, or research findings and recommendations, and what teachers decide will actually happen in classrooms. Teachers apply the acid test of "practicality" in deciding "what works" and, as a result, differentially take up the

frameworks, policies, syllabi that are presented to them. They often do this in the name of responding to the particularities of their contexts, and the perceived strengths and weaknesses of the cohorts of children from their area, expressed as children's learning "needs". Thus, research must struggle to count in the world of the teacher, and to persuade teachers of its relevance to their situation and their children (Groundwater-Smith & Mockler, 2006). We would argue that scientific research that deliberately excludes practitioner perspectives, or treats these as variables to be controlled or eliminated, may fail to "count" in contexts of practice.

The River Literacies Project is a good example of the way in which research can be quite contradictorily located between policy contexts and teachers' perceptions. In the first instance, our Industry Partner, the Primary English Teaching Association, had wanted to work with us because of our reputations for critical literacy and collaborative action research. As researchers, we were invited into an existing community of practice - teachers from around the Murray-Darling Basin bioregion who work as Special Forever Coordinators, brokering high-quality selected writing and artworks of local children in their school regions. Here we note that we were known as 'the researchers' by these educators, and initially viewed with some suspicion. We were seen as outsiders, or even worse perhaps, as university academics coming into their program. Towards the end of our work with Special Forever Coordinators, one initially reluctant teacher acknowledged the reservations that she had had at the time:

Really it's been a great privilege working with [names individual team members], and the whole team. What I've got out of this has been unbelievable. The people who were in that room in Mildura, I don't know when it started, a number of years ago, you know how hesitant I was when I actually tried to influence a number of you not to be involved in it, because my past experience of action research projects hadn't been very positive. The researchers had got a lot out of it and I hadn't got much out of it at all. This [River Literacies] has been totally different. I've got a huge amount out of it, as have other staff members on our school, and I've become a much better teacher for that, so thank you to those people that have badgered me over the years.

This teacher was not alone in her doubts. School-based educators are frequently sceptical about university-based researchers. As the coordinator quoted above notes, research presented as collaborative can often turn out to be biased towards the purpose of the outsiders, leaving classroom insiders feeling exploited. In the River Literacies Project, as in many others we had undertaken, we needed to demonstrate to the teacher participants that we could indeed be trusted, and that undertaking research with us might be mutually beneficial. At the same time, we needed to ensure that our work was an appropriately and critical scholarly analysis of the environmental communications curriculum and pedagogies of the Special Forever program and took into account the goals of our Industry Partners.

We see, however, that the struggles to negotiate with and engage the profession in the research process - thereby designing research with high levels of validity for practitioners – are increasingly being bypassed by recent policy/research initiatives. In the current environment, teacher wariness and varied levels of uptake of policy are being cast as problematic, and as an explanation for differential learning outcomes among different groups of students according to class, culture, gender and so on. More and more, the problem is being seen as a lack of uniform uptake of

recommended "evidence-based" practice. Luke (2007), discussing the case of literacy, argues that governments have responded to the ongoing problem of the failure of working-class, indigenous and marginalised groups to learn to read by tightening enforcement and standardisation of the pedagogical exchanges that occur in classrooms, which increasingly reduces teacher agency and removes literacy from any local context of use:

This response is based on two interlocking assumptions. First, the fundamentalist assumption is that all children, regardless of habitus, are lacking and require a uniform version of the basics sourced in the institutional package and not in community or even common, secular culture. Second, current policy assumes that the local variables and idiosyncrasies of the exchange are the problem, whether generated by context, teacher or student habitus. The result is a policy bid to centrally control and quality assure the exchange by steering via grids of performativity. In this regard, the current policy is an attempt to industrially manage and define literacy education, its shapes and forms. This entails a mis-culturalisation of literacy education, a further distancing it from community life forms and practices, textual traditions residual and emergent (Luke, 2007, p.84).

Such developments show that there are strong parallels between what is happening to the management of educational research and of classroom practice via "quality assurance" processes and performance requirements that seek and reward "fidelity" (Achinstein & Ogawa, 2006) to centrally determined objectives. As Luke notes, this leads to the erasure of local concerns, non-standard forms and practices in schools; we would argue that it has similar effects in the field of research.

As Delandshere (2006) has noted, research that employs randomised controlled trials is now an explicit requirement of studies that are awarded public funding in the USA. All other forms of research, including, for example, historical, philosophical and literary scholarship, are considered "non-scientific" in that context, and their importance for understanding education and schooling is dismissed. We agree with her that "the narrow conception of experiment defined by experimental design methodology is, [however], terribly inadequate in representing the complexity of most questions of importance in educational research" (Delandshere, 2006, p. 75). As she puts it:

It is difficult to study complex questions through experimentation because this research strategy requires that all individuals' circumstances, conditions and characteristics be similar except for the few aspects studied under experimental conditions. A complex question involves many differences between people that cannot be reduced or controlled (p. 76).

Moreover, experimental strategies focus on the individual, do not include research subjects or informants in the process, and effectively prevent "the articulation of socio-cultural explanations of learning" (Delandshere, 2006, p. 76). Practices that privilege this version of research, and assess it to be the version of research that counts, will also "inevitably result in the subordination of teachers and the marginalisation of researchers who engage in different forms of inquiry" (p. 79). Also, a policy and funding climate that continues to insist on normative definitions of research is likely to suppress the very things that the federal government claims to

want to encourage: creative and innovative research that holds significance and benefit for the majority of Australians.

Finally, we need to recognise that this is not a completely negative context. At the same time that some government policies narrow what counts as research, others encourage innovative multidisciplinary approaches and connections to practical and lived problems. As our discussion of the difficulties facing our reviewers for the special issue shows, the professions and academics alike face challenges in recasting their approaches to take account of such work. This remains important work if we are to successfully contest policing of disciplinary and methodological boundaries, and avoid the push towards narrow normativity in both research and practice.

REFERENCES

- ALEA. (2006). *About AJLL*. Retrieved August 29, 2007, from http://alea.edu.au/html/publications/16/australian-journal-of-language-and-literacy.
- Australian Technology Network. (2004). *Research and innovation*. Retrieved July 29, 2007 from http://www.atn.edu.au/wgroups/research.htm.
- Achinstein, B., & Ogawa, R. (2006). (In)fidelity: What the resistance of new teachers reveals about professional principles and prescriptive educational policies. *Harvard Educational Review*, 76(1), 30-63.
- Barton, D., & Hamilton. M. (2000). Literacy practices. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). London and New York: Routledge and Taylor & Francis.
- Boomer, G. (1999). Pragmatic-radical teaching and the disadvantaged schools program. In B. Green (Ed.), *Designs on learning: Essays on curriculum and teaching by Garth Boomer* (pp. 49-58). Canberra: Australian Curriculum Studies Association.
- Cambourne, B. (2006). Dorothy Dix meets Slim Dusty. In B. Doecke, M. Howie & W. Sawyer (Eds.), *Only connect: English teaching schooling and community* (pp. 179-194). Kent Town, SA: Wakefield Press.
- Cochran-Smith, M., & Lytle, S. (2006). Troubling images of teaching in No Child Left Behind. *Harvard Educational Review*, 76(4), 668-697.
- Comber, B. (2006). Critical literacy educators at work: Examining their dispositions, discursive resources and repertoires of practice. In R. White & K. Cooper (Eds.), *Practical critical educator: Integrating literacy, learning and leadership* (pp. 51-65). The Netherlands: Springer.
- Comber, B., & Cormack, P. (2007). Constituting the teacher of reading in contemporary Australian literacy debates. R. Openshaw & J. Soler (Eds.), *Reading across international boundaries: History, policy and politics* (pp. 87-109). Greenwich, CT: Information Age.
- Comber, B., Cormack, P., & O'Brien, J. (2001). Schooling disruptions: The case of critical literacy. In C. Dudley-Marling & C. Edelsky (Eds.) *Where did all the promise go? Case histories of progressive language policies and practices* (pp. 83-104). Urbana, Illinois: National Council of Teachers of English.
- Comber, B., & Nixon, H. (2005). Children re-read and re-write their neighbourhoods: Critical literacies and identity work. In J. Evans (Ed.), *Literacy moves on: Using*

- popular culture, new technologies and critical literacy in the primary classroom (pp. 127-148). Portsmouth, NH: Heinemann.
- Comber, B., Nixon, H., & Reid, J. (Eds.). (2007). *Literacies in place: Teaching environmental communication*. Newtown: Primary English Teaching Association.
- Commonwealth of Australia. ARC. (2004) ARC research networks: funding rules for funding commencing in 2004. Retrieved August 29, 2007, from http://www.arc.gov.au/rtf/RN_Funding_Rules_new_priorities_v2.rtf.
- Commonwealth of Australia. (2005). *Teaching reading*. Canberra: Australian Government Publishing Service.
- Commonwealth of Australia, DEST. (2005a) National research priorities. Retrieved August 29, 2007, from http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_iss_ues/national_research_priorities/.
- Commonwealth of Australia, DEST. (2005b) National research priorities Overview. Retrieved 29 August 2007, from http://www.dest.gov.au/NR/rdonlyres/61DE0AD2-6857-4D64-9B1D-D42324ACAE55/2850/overview.pdf.
- Commonwealth of Australia, DEST. (2007a) National research priority implementation plans. Retrieved 29 August 2007, from http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_iss_ues/national_research_priorities/implementation_plans.htm.
- Commonwealth of Australia, DEST. (2007b) National research priorities standing committee. 'Terms of reference'. Retrieved 29 August 2007, from http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_iss_ues/national_research_priorities_standing_committ_ee.htm#Terms_of_Reference.
- Cormack, P., & Nichols, S. (2001). *Modes of learning: Mapping the literacies of senior secondary schooling*. Adelaide: Senior Secondary Assessment Board of South Australia.
- Cormack, P., Green, B., & Nixon, H. (2007). Introduction: Literacy, place, environment. *Australian Journal of Language and Literacy*, 30(2), 77-81.
- Delandshere. G. (2006). "Scientific" research in disguise: And the threat to a spirit of inquiry. In B. Doecke, M. Howie & W. Sawyer (Eds.), *Only connect: English teaching schooling and community* (pp. 69-82). Kent Town, SA: Wakefield Press.
- Doecke, B., Howie, M., & Sawyer, W. (Eds.). (2006). Only connect: English teaching schooling and community. Kent Town, SA: Wakefield Press.
- Fairclough, N., Graham, P., Lemke, J., & Wodak, R. (2004). Introduction. *Critical Discourse Studies* 1(1), 1-7.
- Freeman, M., deMarrais, K., Preisske, J., Roulston, K., & St Pieree, E. (2007). Standards of evidence in qualitative research: An incitement for discourse. *Educational researcher*, 36(1), 25-32.
- Gee, J. (2000). The new literacy studies. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 180-196). London and New York: Routledge and Taylor & Francis.
- Green, B. (Ed.). (1999). *Designs on learning: Essays on curriculum and teaching by Garth Boomer*. Canberra: Australian Curriculum Studies Association.

- Green, B., & Cormack, P. (2007). Writing place in English: How a school subject constitutes children's relations to the environment. *Australian Journal of Language and Literacy*, 30(2), 85-101.
- Green, B., Cormack, P., & Nixon, H. (2007). Introduction: Literacy, place, environment. *Australian Journal of Language and Literacy*, 30(2), 77-81.
- Groundwater-Smith, S., & Mockler, N. (2006). Research that counts: Practitioner research and the academy. In J. Blackmore, J. Wright & V. Harwood (Eds.), Counterpoints on the quality and impact of educational research: Review of Australian Research in Education (RARE) No. 6. April. (pp. 105-117). A Special Issue of Australian Educational Researcher.
- Hawke Research Institute for Sustainable Societies (2007). Centre for Studies in Literacy, Policy and Learning Cultures (LPLC). Retrieved January 8, 2008 from http://www.unisa.edu.au/hawkeinstitute/cslplc/default.asp.
- Kerkham, L., & Comber, B. (2007). Literacy, places and identity: The complexity of teaching environmental communications. *Australian Journal of Language and Literacy*, 30(2), 134-148.
- Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse: The modes and media of contemporary communication*. London: Arnold.
- Lane, R., Lucas, D., Vanclay, F., Henry, S. Wills, J., & Coates, I. (2005). "Committing to place" at the local scale: The potential of youth programs for promoting community participation in regional natural resource management. *Australian Geographer*, *36*(3), 351-367.
- Luke, A. (2007). Pedagogy as gift. In J. Albright & A. Luke (Eds.), *Pierre Bourdieu and literacy education* (pp. 68-91). Mahwah and London: Erlbaum and Routledge.
- Martusewicz, R., & Edmundson, J. (2005). Social foundations as pedagogies of responsibility and eco-ethical commitment. In D. Butin (Ed.), *Teaching social foundations of education: Contexts, theories and issues* (pp. 71-91). Mahwah NJ: Lawrence Erlbaum.
- Nixon, H. (2007). Expanding the semiotic repertoire: Environmental communications in the primary school. *Australian Journal of Language and Literacy*, 30(2), 102-117.
- Nixon. H., & Comber, B. (1995). Making documentaries and teaching about educational disadvantage: Ethical issues and practical dilemmas. *The Australian Educational Researcher*, 22(2), 63-84.
- Reid, J. (2007). Literacy and environmental communications: Towards a "pedagogy of responsibility". *Australian Journal of Language and Literacy*, 30(2), 118-133.
- Shannon, P. (2007). Lessons from the Inspector General's report and its mission to help the poor. *Language Arts*, 84(5), 461-462.
- Smith, D. (2005). *Institutional ethnography: A sociology for people*. Lanham: AltaMira Press.
- Smith, M. (2004). *Political spectacle and the fate of American schools*. New York: RoutledgeFalmer.
- Somerville, M. (2007). Place Literacy. *Australian Journal of Language and Literacy*, 30(2), 149-164.
- Stables, A., & Bishop, K. (2001). Weak and strong conceptions of environmental literacy: Implications for environmental education. *Environmental Education Research*, 7(1), 89-97

- Street, B. (2001). *Literacy and development: Ethnographic perspectives*. London: Routledge.
- University of South Australia. (2004). *Eco-social sustainability in the Murray-Darling Basin research network*. Retrieved August 29, 2007 from http://www.unisa.edu.au/hawkeinstitute/research/ecosocial/eco-social.asp.
- US Department of Education (2006) What Works Clearinghouse evidence standards for reviewing studies". Retrieved December 1, 2007 from http://ies.ed.gov/ncee/wwc/pdf/study_standards_final.pdf.
- Watson, M. (2003). Performing place in nature reserves. *Sociological Review*, 51(2), 145-60.

Manuscript received: September 15, 2007 Revision received: December 1, 2007

Accepted: January 7, 2008