

THE BABY AND THE BATH WATER: REFLECTIONS ON CURRENT DEBATES IN EDUCATIONAL RESEARCH

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Paper to be presented at the annual AARE conference, Newcastle, 1994.

A crisis in education?

Recent years have seen changes in the public perception of education. Evidence for this claim comes from reports in newspapers and other popular media which reveal a change in direction of 'education news'. While claims about the decline in standards and the problem of youth discipline still persist, they seem to have lost impact in the face of a new storm of writing about structural failures in our educational provision. And so we regularly have headlines about the unmet demand for post school options, faults in the tertiary allocation system or in the Higher Education Selection Scores (HESS), mistakes in the senior school examination marking ... and more recently an over supply of tertiary places! Features such as these are newsworthy because the emphasis has switched from blaming the students - or the teachers - to a broadside against the way in which the whole educational arena is organised. In this environment another significant change has arisen - schools have adopted an aggressive marketing stance in which they seek to maintain themselves by vigorous self promotion, both within and between the public and the private sectors. At a time when we are officially heading towards a national curriculum and a more even provision around the country, the daily press is full of advertisements loudly proclaiming the benefits of one or other particular school over

the rest, and most especially over its immediate neighbours. Oftentimes the claims put forward in this initiative are highly questionable, for example that smaller class sizes immediately produce advantages for all comers, that girls' only schools are the best form of girls' education, that a school with rigorous selection procedures will be best for 'your' child etc. Claims such as these constitute legitimate questions for educational research and demonstrate a need for a stronger relationship between the research community and the general public.

The restructuring of educational systems in Australia during these last years of the twentieth century can be read as a sometimes incoherent attempt to restore some semblance of order and public trust in our

schooling system. At one level such a shift was only to be expected as one outcome of the Dawkins-led expansion of the tertiary sector - by making tertiary education the expectation of increased numbers of school leavers rather than restricted to a select few, the security of traditional university selectivity was jeopardised. Many would consider this to be not a bad thing and see it as entirely proper that a higher level of public scrutiny be directed at the selection processes. There have been in the past year some few indications that the actual content of tertiary courses will also become the target of media investigation, and of course we are all currently experiencing the rigours of the Quality Review in our various locations. Which processes still leave open questions to do with the meaning of quality, how is it to be defined, much less measured and how do you organise 'public scrutiny' anyway? In such a climate one might have thought there would be much press on education research to be operating vigorously to, if not answer questions, at least suggest directions. Unfortunately for us all this does not appear to be happening.

What I am suggesting in this paper is that the public response to the changes in education structures may well be reflected in the academic education community itself in a loss of faith in education research. A cursory reading of the academic employment sections of the national paper suggests that academics from Education faculties are not being involved in the Teaching and Learning Centres springing up in Universities around the country. Given the lack of recognition of Education staff within their own Universities it is perhaps not surprising that their expertise goes largely unremarked in the bureaucratic reformation of the larger education systems. I believe this loss of credibility is due in good part to the wranglings within the education research community (by which term I include all those engaged in education research with a special emphasis on those studying for higher degrees in education) about the nature of the research enterprise and hence about the ways in which one goes about the job.

Reading education research journals one is immediately aware of a high

degree of contestation with respect to research methods/methodologies. (NB My interpretation of these terms is that they are not interchangeable and that method is concerned with the techniques of data collection and methodology consists of a theoretical rationale for proceeding with a particular method.) In the past decade the numbers of manuals concerned with introducing qualitative approaches in education research has increased markedly and there appears to have been a related swing to publishing qualitative studies. Certainly at the level of MEd thesis, which constitutes for many the first point of entry into academic research, the numbers of qualitative/interpretive/interview-based studies have skyrocketed. In many of these recent methodology texts and research reports there is frequent derogatory mention of the other/older/less worthy way of doing research and considerable discussion of the limitations of positivistic number crunching. This position, viz of constructing and rubbishing the opposition, appears to be a necessary first move in the game of entering the research scene. One must locate the chosen method as different from and necessarily at odds with standard approaches. And nor is the move limited to interview-based qualitative approaches - it frequently appears in criticalist, feminist and narratological approaches as well, as in the following example:

Storying and narratology are genres which allow us to move beyond (or to the side) of the main paradigms of educational inquiry -- with their numbers, their variables, their psychometrics, their psychologies, their decontextualised theories.
(Goodson, 1994, abstract - my emphasis)

Often these said 'wranglings' fall far short of the concept of debate - the more appropriate metaphor seems to come from the goldmining days - stake your claim of new ground and defend it by deriding all previous efforts. There is in fact very little in the way of debate, by which I mean ongoing discussion and dialogue in an effort to produce closer and closer approximations to the truth. As in some re-version of colonising effort the newer arrivals have set up their separate camps and resist any possibility of common ground. Paradoxically even those camps in whose theoretical ground the concept of rational dialogue would appear pivotal - such as the criticalist tradition following Habermas' notion of the Ideal Speech Situation - constitute themselves as beyond communication with quantitative approaches. There is no possibility of conversation (Smith and Heshusius, 1986).

The more recent arrivals to education research territory, the poststructuralists, appear to have abandoned the concept of truth altogether - in their approach language and text take centre stage and the parameters governing the theatre of education are read as constructions of hegemonic practices through which we speak our/their lines. Education is of course not the only research discipline which

is caught between a recognition of the usefulness of poststructuralism and its capacity to say interesting things about an issue and the wave of scepticism and relativism into which it appears to impel the research enterprise (Windschuttle, 1994). One is left with the question If there is no truth and can never be such a thing, why should we bother to try to find out any more than we already know, think or feel in the first place? Taken in its extreme, poststructural theory gives rise to another metaphor - that of the philosopher/researcher, brush in hand, totally painted into a corner and unable to move in any direction because all directions are equally invalid and none more worthy than another. In the following section I will briefly outline the dimensions within which the reported "differences" in education research are played out so that we can begin to get out of the corner.

Historical context of education research

In the west generally for much of this century the dominant way of understanding and conducting research in education was as empirical enquiry, usually involving large numbers of responses and relatedly statistical analyses. The Australian scene was somewhat behind North America and the UK in the numbers of studies enacted on Australian schoolchildren. We tended to rely too heavily on results derived from overseas work. Issues of culture and context were rarely considered before the 1970s. Here as elsewhere, the discipline base for much of this work was Educational Psychology and psychological testing of the concomitants of learning formed the dominant strand within the dominant stream of individual-focused test-based educational research (Gage, 1989). Up until the mid 1980s more people embarked on higher degrees in education and the majority of successful completions of research masters and doctorates were in the area of Educational Psychology. It is beyond the brief of this paper to canvas yet again the problems identified with much of the empirical work in education save to make the following points.

Critiques which attack this work, following Habermas, as the application of rigid and inappropriate methods of natural science to the human sciences oftentimes are guilty of either downright ignorance or deliberate misrepresentation of the scientific method. This method has after all come a long way from its origins in reified concepts of matter and measurement. Its early rigidity and associated limitations have long been recognised within the scientific community ; ever since

Heisenberg, one of the founders of Quantum Mechanics, pointed out that the act of attempting to fix an attribute such as measuring a moving object had the effect of disrupting the behaviour of the object such that there would always be an element of error in the results. Good, traditional, mainstream science has always acknowledged potential limitations associated with its methods. The critiques from social science should therefore be directed at the mis-application of

scientific methods rather than the methods themselves. It is surely an issue for educators generally that the optimism that accompanied the post enlightenment period, nowhere more visible than in the nineteenth and early twentieth century thought, should have left a legacy in education as it had done in so many disciplines. By now we are much more sophisticated in our understanding and the sense of naive faith in the power of science to reliably and systematically fill out the blanks in our knowledge jig saw seems as quaint as those outmoded 'scientific' theories of phlogiston or indeed of the philosopher's stone itself.

By the late twentieth century the 'end of certainty' principle applies, albeit unequally, to all the areas of knowledge - and assuredly to knowledges associated with the social sciences. This principle has profound implications for questions of educational procedure - does the act of teaching necessarily constitute certainties which then have to be re-negotiated as the student progresses? For the moment it seems that this is a moot point - as educators we look for a proper sceptical response in our students, we encourage them to be critical, to ask what if? and why not? who's asking? .. and in whose interests? what are the underlying assumptions? And yet I believe that we have not entirely travelled the distance to embrace total relativity. Students these days are inclined to see fact as reducible to opinion -- 'it's just your opinion really' has become as innocuous as 'it all depends on the individual', both of which cliches function as gospel for many students in teacher education and both of which reduce the larger questions of research to banalities. I would argue that the very continuance of education research assumes in its origins and implies in its practice that there is reliable knowledge to be had about educational matters such as student learning and school culture. Of course this knowledge may not have the status of universal truth, but it does form the basis of that which is constructed as truth within its own context and which may therefore be applicable to contexts elsewhere.

The split in education research.

Directions in educational research which are not new but which have been gaining momentum in recent decades are those that eschew the reliance on statistical inference which had for so long characterised much of the work. We have seen something of what Gage has termed 'the demise of objectivity-seeking quantitative research on teaching' and applied ourselves to a range of methods which involve human interaction and often as not talking to people about what they do and how they feel about it (Gage,1989). Increasing numbers of papers, books and journals have been published in which the dominant form of reporting educational events is in terms of participants' voices, both students and teachers. One could be forgiven for imagining that qualitative approaches, as this work is so often self styled, have become the new orthodoxy -- and yet this work frequently justifies itself as

oppositional, as not repeating the evils of quantitative approaches, as not reducing human responses to sets of numbers... . The move is to a heightened use of language as the medium of communicating results, descriptive language, reporting language, analytical language. And, as seen in the quote from Goodson above, the language itself is laden.

The effect has been the polarisation of the education research enterprise into apparently oppositional realms. Claims are made on behalf of the approaches labelled as interpretive and critical that they are inherently different from the narrow depersonalised would-be objective focus of the dominant paradigm. In my experience as an examiner of higher degree theses in education I find it troubling that so much of the 'methodology chapter' in recent work is taken up with discussion of the perversity of positivistic (ie pejorative) quantitative approaches - discussion which is usually irrelevant to the task in hand because in fact the writer seeks to justify an entirely appropriate interview-based method of data collection. Such work appears to reflect almost perfectly the position adopted by much of the literature on research methods and many of its teachers. It frequently appears to be the case that these protagonists are more clear and more sure about what they are not than about what they are. What is clear is that the sense of paradigms, passionate allegiances or rival territories continues to flourish. But not in all quarters even with qualitative researchers. In a recent work Lecompte and Preissle, long time proponents of qualitative approaches state:

... the practice, appearing so frequently in the methodological literature, of polarising social science research into qualitative ("soft" "subjective" and "inferior", even "feminine") and quantitative ("hard", "objective" and "superior", even "masculine") is a parody unduly dichotomising research designs.
(LeCompte and Preissle, 1993,46)

While some have argued that in fact educationists are caught up in a war between the founding social research disciplines, with Psychology being the source of quantitative approaches and Anthropology or Sociology favouring the qualitative approaches, others point out that within these disciplines there is typically a range of research styles which prove acceptable. It may be of course that the status of Education as a non-foundational discipline renders it particularly vulnerable to paradigm wars.

Undoubtedly the 'linguistic turn in educational research' (Lather's phrase) and its attendant discourse has been and may continue to be particularly productive but I would argue that it needs not to depend on a turning away from numbers - and indeed that education research does so at its peril. The current situation is reminiscent of a dreadful re-working of C.P.Snow's Two Cultures such that in educational research those who can count sometimes feel as though they are guilty

of and complicit with a perversion and innumeracy is hailed as akin to greatness. There are some questions that are absolutely appropriate to reduce to quantifiable entities in our discussions about education. Questions such as the number of children currently enrolled at each level, the number who have achieved tertiary entry - and the number who have not .. to name but a few. All of us need these facts, this sort of really useful information, to account for some of the theories we use in our teaching and research. The questions that are taken up with passion and perseverance by qualitative, microanalytical, criticalist, feminist - and even poststructuralist - research in education are underpinned by quantitative evidence that reveals the existence and continuance of groups of people who are demonstrably marginalised, disempowered and rendered other in their education. The key and exciting potential of qualitative work is to show how these effects come into being. Ironically in the reporting of these studies the reader is frequently offered forms of evidence which are essentially quantitative eg four out of the seven interviewees reported ..., all of the women we talked to were married,.. the children were aged between seven and eight years. My point here is simply that the

schism in education research is a construction - and a construction that is fairly loose and somewhat insecure. The point becomes more clear when the discussion turns to an investigation of the meaning of research.

What do we mean by research?

My interpretation of research is as the process of finding out new information and explicating the associated meanings, thus building new knowledge, or of making new connections between existing knowledges, such as sometimes happens in conference papers. Nowadays every primary school child in Australia regularly undertakes re-search - but in this case the information to be sought is new to the student, but not necessarily new to the broader community. What the child does, generally, is to find out for herself information that others already know. In tertiary education research means finding out information or constructing knowledge in a way no one else has already done - or applying some knowledge already known in a new area. And so the task of finding out or data collection needs to be accompanied by analysis of the meaning of the data so that understanding or knowledge can be increased. Ultimately then research is a combination of collecting information and analysing that information in terms of developing or applying theory. Our job increasingly becomes the teaching of research skills (data collection and analysis) and the examining of research projects and theses that conform to this approach to research.

Much of the early debate in educational research was concerned with methods of data collection - and thus subsumed questions about what constitutes data and how much of it was needed. At this level the debate between qualitative and quantitative approaches was constructed

- again reducible to questions about what constitutes data, what and whose questions are being asked and how often? Nor was it ever the case that work that showed a thorough and consistent approach to data collection invariably led to being hailed as a significant breakthrough... The real crunch came, not in the numbers, but in the analysis of the data. The real problem with research centering on statistical analysis was that the statistical packages contained an inbuilt analysis which was often not understood by the non-statisticians who happily applied it, and hence were left to insist on levels of variance and quotients of reliability as though these were ends in themselves. Were the assumptions of the statistics made more explicit the relationship purported to exist between the findings and the theory could have been better developed. All too often such was not the case.

In the case of interpretive or qualitative research, the data analysis constituted a more difficult problem for the researcher. Most reports of qualitative research contain large chunks of respondents' talk, providing the reader with a sense of the human engagement and endeavour that took place. However it is rarely noted that these chunks, albeit large, are themselves selected instances of all the talk that has been so carefully collected and transcribed ... and that the act of selection and transcription disturbs the authenticity of the voice of the respondent. Further that the questions asked - even with the free-floating non-structured interview approach - are frequently designed to contribute to the reading that is being sought. The interestedness of the research operates as a cue to the interviewee much as did the inbuilt value judgments of the 'objective' tests - perhaps more so given the interpersonal nature of the meeting, the eye contact, the body language, the physical presence of the interviewer. On the other hand the virtue of this approach was that the researcher must undertake the analysis herself rather than rely on the statistical package. And this is where a good deal of the difficulty comes in,

especially for beginning researchers whose first up work often appears as master's theses. All too often such work takes the form of simple description of the situation and lengthy quotations from the informants. One thesis I read in the past year contained no less than 60 pages of description without any references and without any analysis. The theoretical basis of the study had been carefully laid out in an earlier chapter but it was not used to construct an analysis of the data. It is inherently dangerous to allow the data thus to 'speak for itself' when what is being offered is inevitably a selective rendering of the material. Qualitative approaches are frequently described as being true to their material, as allowing participants' voices to be heard, as being properly respectful of the complexity of human relationship etc.... This may be the case, but it does not constitute analysis, without which research becomes simply the collection of material, and in my view this isn't a form of research

that is properly an academic endeavour. Significant assumptions built into the interview design are rarely addressed, not the least of which is that the informants operate at a similar level of self awareness or feel similarly comfortable with the issue of self disclosure. While psychometricians had long ago established the concept of test sophistication to account for people's capacity for improvement within the test situation it seems possible that informants could similarly become interview sophisticates and learn to display a better, more wholesome self image to the interviewer.

At the moment the concept of voice is ascendant, some current researchers place great weight on getting their informants to 'tell their stories', thereby (so the rhetoric goes) the silenced are given a chance to speak, the hitherto marginalised have their moment on centre stage. Not surprisingly, work with individual narratives or 'storying' has been taken up wholeheartedly by some sections of the education research community, fitting as it does with the privileging of the individual found in post-progressive educational philosophy. This is of course a highly simplistic approach and one which treats the voice as a form of higher truth - the individual expression of the coherent knowable modernist self. More recently some writers have begun to point to the dangers inherent in the celebration of the individual inherent in some of these approaches which purport to let the respondents 'tell their stories', noting that this highly individualised way of seeing prevents the story being situated within the broader social context where it would relate to political dimensions (see for eg Goodson, 1994).

Other recent challenges to the nature of education research have emerged from people who espouse a criticalist research orientation. In this view, or sets of views, neither empirical enquiry (usually dismissed as logical positivism) nor interpretive research is considered proper. The former because of its reduction of human responses to sets of numerical and quantifiable amounts and the latter because it merely describes and fails to emancipate. The straw persons being thus set up, it is a simple matter to knock them down. In the case of empirical enquiry whose role, according to the criticalists is to predict and control (note the laden terms), it should not and properly does not reduce people to sets of numbers - properly enacted it can provide information about human attributes that are amenable to being measured in this way. Such attributes could include home income level, parents' education, courses taken at school, incidence of truancy .. to name but a few of evident relevance to educational inquiry. The picture gained from such measures is of course far from a total one of any individuals concerned, but it is possible and useful to investigate any relationship that might emerge between variables measured. One obvious one from the above list would be that between

income level and parents' education for instance - and the test would

show that it was not tight in all cases but there was a general trend for people with higher educational achievements to have higher incomes.

As for the criticalist demolition of interpretive research, there is a confusion between method and methodology - interpretive commends an interpersonal method of inquiry, a means of data collection, but without analysis there is no research. The criticalists are thus talking about the method of data collection as though it were the whole thing.

Even more troubling is the fact that the criticalist approach adds on to the definition of research another dimension and one which is particularly dangerous insofar as it has the capacity to disrupt the data collection aspect of the work. Whereas their critique of interpretive research is essentially that it lacks any analysis (a position I do not share as I believe it derives from a mistaken notion about what constitutes research which in my view necessarily includes analysis), their position is unacceptable because it fuses a politics with the research act in such a way as to render any result entirely predictable and unsurprising .. and yet surprises abound! (Ellsworth, 1989) A closer investigation of the logic of this approach is useful at this stage. Proceeding from a position that no research is value neutral or value free, the criticalist approach assumes the rightness of its own criticalist values and invests its projects with them - in other words it uses the principle of the inevitable value-ladenness of human enterprise as an excuse to embrace an unreflective value laden position -- usually celebrated as praxis, but bearing little relation to Gramsci's original formulation -- at the same time as it preaches reflectivity! An alternate view would be to suggest that, given the value laden nature of much research the researcher endeavour to make explicit the values from which the work proceeds in order that any outcome be analysed in terms of its value position - the classic Weberian standpoint.

A war of their own making?

On a more pragmatic level, the criticalist approach espouses a qualitative/interpretive means of data collection in which interviews are frequently used, coupled with observation. This work tends not to be well theorised - it misrecognises its own origins in symbolic interactionism and phenomenology (although the latter does rate a mention, rarely explicated) Thus criticalist research is happy to claim as its own any previous qualitative research whose analysis involved some theorising of social oppression - Willis of course, but also Bourdieu are identified as criticalist researchers, the latter a surprising inclusion since in his rigorous outline of method and methodology he evidenced no emancipatory intent whatsoever, but sought to 'scientise' by giving painstaking details of the processes by which he collected data (Bourdieu, 1977).

The overall point to be made here is that the state of war that has

been used to describe the situation within education research over the past decade is very much of the making of the protagonists, in particular those who espouse a criticalist perspective, but also building from the older qualitative/quantitative divide. In my view there is an urgent need to transcend this situation in education research, not the least because so much time and researcher energy has been expended on the arguments between the approaches rather than on the actual conduct of research.

A case study : coeducation compared to single sex schooling.

At this stage I will briefly describe some of my own work in order to develop a case for a multifaceted approach to educational research and one which borrows happily, fruitfully and gratefully from the various strands of existing research approaches. The research question is concerned with the effect of gender context on schooling outcomes. This question has great and enduring topicality for various sections of the education community. It is also one in which people take up a range of different positions-of-interest. For instance the girls' school lobby have campaigned on the basis that their form of schooling is the most appropriate for girls' learning, parents who have the privilege of choice of schooling frequently raise the question, established single sex schools have been looking at the question increasingly for a variety of reasons ranging from the need to increase student numbers to a desire to offer the most appropriate form of education for future graduates, past pupils of prestigious schools frequently feel committed to maintaining the 'tradition' (whichever it was) in which they were educated ...

The research literature on this topic ranges across a variety of approaches, from measures of educational achievement through indicators of adjustment to tertiary to descriptions of schooling culture within one or other form. A good deal of opinion from established and respected educators is also thrown up by the traditional first stop library search which gives rise to another level of interestedness - the ego investment of reputation and profession.

While the topic has been around since Dale's work in England in the late 60s and early 70s the changes in approaches to educational research questions are immediately evident in the literature - as is the fact that measurement oriented research continues to be applied to this question. Dale had adopted a mixed methods approach, combining survey questionnaires, inspection of academic results and interview data in his initial analysis (Dale, 1969,1971,1973). Shortly after Dale's three volume work was published feminist protest began to be heard claiming that in fact girls achieve a higher standard in girls' schools -- a protest borne out in part by a re-analysis of Dale's data. Thereupon a climate of concern for girls' missing out on standard educational benefits was established, an orientation that gave

rise to a good deal of fact finding about enrolments and achievements by girls in the UK education system.

The point for the present concern is that while those who engaged in this essentially quantitative research enterprise did so from an overtly feminist standpoint. In the terms of the paradigm wars described earlier, a feminist theoretical research position would seem to be aligned with the criticalist perspective in that it seeks to demonstrate in whose interests hegemonic educational institutions operate, and yet this work was done in the positivist empiricist paradigm which was then dominant. In the early 1980s two large scale studies in the UK were to demonstrate that the differences in girls' educational outcomes were related much more strongly to a range of other variables such as school style, home background, ability levels etc than school gender context (Bone, 1983; Steedman, 1983). It might have been expected that this work closed the question of school gender context and its effect on educational outcome. However educational research in England continues to be reported on this topic in the empiricist tradition, examining relationships between the relevant variables and suggesting that in fact the question of single sex or coeducation is still a live one (Nature, 1994).

In this country several educationists who were concerned about gender

equity in education compared girls' schooling outcomes in coeducation and single sex schooling also from an empiricist approach - probably best seen in the work of Carpenter. In this very careful study the researcher pointed to the multiplicity of variables which were seen to impact on girls' educational achievement, some of which interacted with school gender context but most of which did not (Carpenter, 1985). At one stage Professor Eileen Byrne commented on Radio National that the issue was impossible to resolve because 'you weren't comparing like with like' referring to the structural differences between the public and private school systems which were conflated with the issue of gender context. This statement served as a classic reminder of the empiricist dictum 'all other things being equal' without which it is impossible to say anything sensible about the dependent variable. Shortly afterwards the empiricist focus moved from the school to the classroom, comparing interactions and achievement in single sex classrooms with those in mixed classrooms (Rowe, 1988; Leder, 1988). There remains the problem of not having the same students in the comparisons - which also moved to before and after testing, variables further contaminated by the publicity surrounding the setting up of the classes in the first place.

The interesting feature for present purposes is that much of this empiricist work claims a feminist standpoint thereby conflating traditions which, if one takes the paradigm wars description seriously,

are mutually exclusive. Other researchers have sought to comment on the quality of school experience across both types of school organisation and have adopted an approach based around interviews. This work sits squarely in the interpretive/critical tradition and yet justifies itself on the earlier empirical analyses of enrolment patterns and attitude measures. In my own work on the comparison of girls' school experience at coeducational and single sex schools I used a combination of interview and pen and paper testing along with carefully recorded prolonged observation of classroom sequences and schoolyard behaviour patterns. While I found that different data offered explanations for different sorts of questions, the picture I was able to build up from a combination of approaches was better, in the sense of being more complete, than had I restricted my research to attitude measurement or classroom observation on its own. While I was able, using quantitative measures, to demonstrate changes in girls' attitude to school and to school subjects as they progressed through school, analysis of the qualitative data produced some possible explanations for these changes in the light of previous feminist analysis of schools and classrooms (see Gill 1991 for an extended discussion).

Limitations of the debate.

None of the above work is particularly useful to parents whose pragmatic needs are evident in the perennial question Where shall we send them?, except insofar as it can work to redress the currently prevalent myth that girl students are invariably better off in single sex schools! Some of the work can be useful to the teachers who face their daily task with a commitment to gender equity and social justice and feel hopelessly trapped within a system destined to render such goals unachievable. In other words an emancipatory intent can be supported by careful and prior research to develop into strategies and practices which, with ongoing monitoring, can bring about change. The trouble with the action research model (associated with the criticalist tradition and popularised in this country by Stephen Kemmis at Deakin) which has had widespread acceptance in school communities is that it implies the action and the research are almost simultaneous. In my view research should happen prior to the action and then the

plan-act-reflect cycle which constitutes so much a regular part of teachers' work can be adopted in a systematic way.

The wider acceptance by the education community of the criticalist perspective is surely nowhere more evident than in the government sponsored report Listening to Girls which formed the first stage of the evaluation of the National Action Plan for Girls and Education. This report is compiled exclusively in terms of a non-empirical interview approach and has generated a huge amount of qualitative data and much discussion in educational circles. Unfortunately it seems that the

report also stands as evidence of the weakness of the criticalist tradition. From reading the report there is no way of knowing how many girls were interviewed, how often the girls spoke of the issues that are described, what the questioner/interviewer did to elicit these responses, how much debriefing was involved ... in other words the degree to which the schooling situations described are representative of schools around the country.

A public role for education research?

I emerge from the debate/dispute/war zone surrounding educational research even more of a pragmatist than when I entered. There are important questions for the Australian education community to address and they need to be researched at a local level. Theories and solutions need to be derived from the context in which the issues arise. Researchers should use whichever methods of data collection best suit the questions they wish to address. As I see it, the adoption of a mixed methods approach will often prove more productive than a single line of inquiry. The multiple discourses of educational research may then be utilised in ways which strengthen the research endeavour even as they inevitably broaden the research enterprise. We cannot afford to continue to speak in tongues which separate us from one another and from the public perception(s) - there is a need to address the issues from a range of perspectives precisely because the larger community is itself constituted around dimensions of difference.

Lastly, following several American educationists (Barone 1992; Gage, 1989) I would argue that it is indeed incumbent on the education research community to take up its role as educator of the public awareness and not just the restricted space of academic journals and conferences. The situation in this country at present is rather akin to that described by Jacoby who wrote

... as intellectuals became academics they had no need to write in a public prose; they did not, and finally they could not.
(Jacoby cited in Barone, 1992, 22)

It is imperative that the education research community develop ways of communicating with the media and popular ideas if we are really serious about getting the schools to work in ways that are understood and respected by their communities. I say this despite having some very negative experiences myself when interviewed by Australian journalists.

Having talked for some forty minutes with one recently about the interrelated issues involved in the comparison of coeducation and single sex schooling in terms of optimal outcomes for girls, I was quoted in a major paper as saying "It's all very complicated!" End of story.

In conclusion I want to reiterate my contention that there is a need for the research community to maintain a clarity about the project of

educational research - a project which in my view centres on the production of useful ways of thinking about schools and schooling. The

debates or partisan positions that I have outlined in this paper have worked to cloud the direction and purpose of research in education. There is a sense in which these tensions have become the bath water of the title and it is time that they were thrown out. At the same time the baby, that repository of really useful educational knowledge, must be carefully tended and maintained in the interests of a stronger relationship between schools, their communities and educational research.

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