Transforming research culture? A critical analysis of social capital building through/in a research network

Joan Forbes University of Aberdeen

Abstract

This paper analyses the work of a policy review group within the Schools and Social Capital Network (SSCN) of the Applied Educational Research Scheme (AERS) in Scotland. The AERS discourses of inter-institutional collaboration are introduced and the role of collaboration in a redesign of knowledge production and transfer in the Scottish educational research context explored. The conceptual frame of social capital is then introduced and used to critically analyse the work of one AERS SSCN policy review group to uncover signs of emergent more collaborative practices of knowledge generation and exchange which AERS may be producing. The analysis points to some success in the redesign of inter-institutional educational research in Scotland as collaborative rather than competitive, but, critically, this analysis also identifies a number of important issues and questions in relation to the institutional distribution of research capacity and benefits that now need to be considered and addressed for the sustainability of such collaborative – and non-competitive - research relationships and networks beyond the life of AERS.

Introduction

The main focus of this article is to explore some of the practical and political issues and challenges from the work of one activity group within a larger national project that aims to engender and develop new *collaborative* practices of knowledge production and knowledge transfer in educational research in Scotland which would build research capability and capacity more widely than hitherto. *Collaboration* is viewed as a key category in the discourses around the creation and redesign of links for knowledge transfer. For example, Jones (2007) states that, under the category of collaboration, universities will:

Engage with external agents...and create links between each other, sometimes to redress the excesses of competition brought about by policies such as the Research Assessment Exercise (107).

In what follows it will be argued that the Applied Educational Research Scheme (AERS) constitutes an example of a national research reform project the aim of which is a transformation of educational research practices in Scotland in line with the educational restructuring that has occurred in countries world-wide (Lindblad and Popkewitz, 2004, Ozga

and Jones, 2006, Ozga, Seddon and Popkewitz, 2006). A number of critical points are made regarding social capital building (see, Fine, 2001) in and through more collaborative inter-institutional research practices (Holligan and Humes, 2007), but it will be suggested that the collaborative policy review process examined here built some dimensions of social capital (see, for example, Coleman, 1988, Bourdieu and Waquant, 1992; Putnam, 1995 and 2000) among the participant practitioners and their institutions.

AERS was established as a specific strategic response by the Scottish Higher Education Funding Council (SHEFC) to the poor performance of the education faculties of the Scottish universities in the 2001 Research Assessment Exercise. No Scottish higher education institution received 5 or 5* gradings; four institutions were awarded a 4 and two received 3s; two institutions were not returned and therefore received no research funding. SHEFC undertook to provide specific and strategic support for research capacity building, but sought to do this in a different way from its usual strategic research development grants, by aligning it with substantive research in areas of policy concern. The Scottish Executive matched the funding from the Scottish Funding Council (SFC) on the assurance that research would be undertaken in relation to the National Priorities that it had identified, in attainment, framework for learning, inclusion and equality, values and citizenship and learning for life.

In announcing the scheme, SHEFC spoke of the aim to 're-invigorate and strengthen applied educational research and its relevance to practice and policy in Scotland' (SHEFC, 2002). The £2m available for the scheme was subject to the usual tendering process and all HEIs were invited to submit proposals. The successful tender was produced by a consortium of HEIs by the universities of Edinburgh, Stirling and Strathclyde, which undertook to 'embed research into the cultures and organisation of education faculties and departments in Scotland, and other departments with relevant interests' (Consortium, 2002) and sought to do this by integrating capacity building into the practice of research. AERS sought to encourage the development of more inclusive and collaborative 'networked' systems and structures for knowledge transfer in the field of educational research that would have greater currency with research users than previous SEED/SHEFC funded research that assumed competition. AERS aimed to both re-structure and re-culture educational research; and it may be argued that the initial tight focus on bureaucracy, systems and structures necessary for research restructuring, albeit a priority for the consortium members, remained too long the main focus, limiting the re-culturing activity and so limiting the effects of AERS for significant cultural change in educational

research. The concept of the collaborative research 'network' is fundamental to the AERS initiative:

The commitment to collaboration and to the principle of network organisation across the system were factors that made AERS possible, and continue to create the conditions in which it operates (Ozga, 2006, 11).

For an account of the background to AERS, its research capacity building aims and links to the Economic and Social Research Council's Teaching and Learning Research Programme (TLRP) contextualised within an analysis of the infrastructure of educational research in Scotland, see Humes (2007).

As envisaged in the tender document (Consortium, 2002), the AERS research networks supported research capacity building, giving wider groups of stakeholders within Scottish education opportunities to participate and contribute to research activity. One such mini-network (hereafter, group) was the policy review group which was formed within the Schools and Social Capital Network (SSCN) of AERS and it is the collaborative research activity of that group which is analysed in what follows. Group membership comprised a mix of teacher, teacher educator practitioners, research fellow, professional organization representative and an agency worker in the field of social capital (participants are named and their institutional affiliations listed below in an appendix). The group offered members the opportunity to learn about policy review and knowledge generation in a mixed occupational group offering the scope for diversity, commonality and new horizons (Jones and Salmon, 2001).

Over a period of eight months the group collaboratively engaged in research and review, using the theoretical framework of *social capital* (see above). A number of Scottish policies bearing on the opportunities for young people to obtain better outcomes from schooling were selected and reviewed and the knowledge generated was published as a working paper (Schools and Social Capital Network Policy Review, 2005) (hereafter, SSCN Policy Review). It is important and timely that such redesigned collaborative knowledge production and transfer activities are critically examined to inform future practices. This article now identifies and maps some of the contributions that collaborative practitioner policy review can make within a specific policy arena.

The review group research

Membership of the policy review group was open to academics and practitioners in education across Scotland and ten individuals joined the group. Geographical representation was wide – from the north and north-east to the south-west and including Glasgow, Edinburgh and Stirling.

The SSCN Policy Review (2005) notes that:

Group members had differing levels of familiarity with social capital, but shared an interest in its potential for enhancing the educational experiences of young people and their lives within and outside school (2).

To develop a shared understanding of the concept of social capital prior to undertaking individual and small-group analyses of the selected policy documentation, all members of the policy review group undertook to read papers by Siisiainen (2000) and Bourdieu (1986). All had previously read a SSCN discussion paper (Ozga and Catts, 2004) which introduced the sub-types of social capital in the following terms:

- BONDING SC: characterized by strong bonds among family members: this variety of SC can help people to 'get by' but may also be limiting.
- BRIDGING SC: is less strong but builds relationships with a wider, more varied set of people, for example, workplace or business associates, friends from different ethnic groups: good for 'getting on'.
- LINKING SC: connects people who occupy different power positions so works across
 differences in status: for example connecting individuals to different agencies or services
 (2004, 2; original emphasis).

The definition of Field (2003) also highlights the exclusive potential of 'bonding' ties and introduces a second axis of networks, norms and trust:

Bonding - dense but bounded networks, homogeneity of membership, high levels of reciprocity and trust, exclusion of outsiders

Bridging - loose and open ended networks, heterogeneity of membership, shared norms and common goals, levels of trust and reciprocity may be more limited

Linking - loose and open-ended networks, variety of membership, shared norms and common goals, levels of trust and reciprocity may be circumscribed by competing demands (147).

Having in mind the Scottish Executive's five National Priorities in School Education:

- Achievement and Attainment;
- Framework for Learning;
- Inclusion and Equality;
- Values and Citizenship;
- Learning for Life (Scottish Executive, 2000),

policy group members agreed that the criteria for the selection of policies would be based on a number of framing issues and concerns in the current Scottish social and educational context including relevance to issues of schooling, deprivation, diversity and well-being for young people in Scotland; currency of documentation and review group participants' interests. The agreed protocol for policy critique focused on: theoretical assumptions; research evidence; disciplines or cross-disciplinary domains; stages of education; form of education; type of educational outcome; target populations; resourcing; implications for professions and policy specific issues. For reviewers' guidance and to ensure coherent application across policies, fuller operational definitions for each of these headings were then agreed (see SSCN Policy Review, 2005).

The initial individual review of policies was followed by a second-stage collaborative review. Small groups reviewed three key national policies: *Poverty and Social Exclusion in Rural Scotland* (2001); *A Curriculum for Excellence* (2004); and *It's Everyone's Job to Make Sure That I'm Alright: Report on the Child Protection Audit and Review* (2002).

A meta-analysis of the connections engendered in that review activity now follows, with the matrix of social capital provided by the two axes of *bonding*, *bridging* and *linking* ties and of *networks*, *norms* and *trust* (Halpern, 2005) being used to uncover and examine the operation of social capital in the group. But first a comment on the 'double perspective' method in relation to the social capital analytic employed in this paper: as noted, a framework of social capital sub-types and key terms is used to investigate the workings of a group which was, in turn, using

social capital to examine policy. The aim is not to engage in navel-gazing; rather, to reflexively subject the group's research culture and practices to scrutiny on the same terms as those applied in the group's review of policy.

A meta-analysis of the review group research activity applying social capital

The data gathered for this analysis is limited, drawing on a sample of the review group. Subsequent to the completion of the review, the members of the group were approached by email and asked to respond with any comments to the five questions:

- Did the review seem to you to be the same as other reviews that you have previously undertaken?
- If it was in some way different, can you say how?
- Did it seem to you that we were engaging in new ways of doing research?
- In your experience, was the collaborative aspect of the review in any way innovative?
- Do you feel that the collaborative review practices were in any way potentially 'transformative research practices' (e.g. in terms of changing how the participants will now do research or how research is done in Scotland)?

Respondents were given an assurance that they would not be personally identified either directly or by implication in any report. Not all participants responded – eight did - and inclusion of some responses offered risked compromising that respondent's anonymity and so were disregarded. Similarly, as it raises problems of assuring respondents' anonymity, the analysis does not explore the ways in which group members' perceptions of the working of the group may have been influenced by their own professional background and knowledge bases as, for example, teacher, academic or voluntary agency worker. Although limited, the study serves to signal some possible paths for future research.

Using the very broad sense of the meaning of social capital articulated in the SSCN Policy Review (2005) as:

The combination of norms and values, trust and networks that provide reciprocal benefits for those who engage (2),

the analytic of social capital is applied to map and analyse the effects of the review activity in building participants' social capital. Evidence is sought of - *bonding*, *bridging* and *linking* around *networks*, *norms and trust* - between participants within the processes of the SSCN policy review group.

Mapping and analysing some social capital intersections

As noted above, an important aim in the wider AERS project is to increase research capacity nationally at a system and structural level, and implicit in that is the aim of developing individuals' and institutions' research capabilities through the formation of new networks, norms and trust that bridge and link educational researchers and their home institutions and so create new research connections.

How were new norms of research capability built through the network activities? Regarding learning about construction and use of a policy review framework or protocol, one respondent commented:

This was a new experience for me and I would say it introduced me to a new technique which I have used since when examining a text.

The policy review group was co-led by a lecturer and senior research fellow from AERS consortium universities. An early priority for the co-leaders was to establish principles for engagement in intellectual work. While seeking to establish a research network characterized by conditions and norms of trust, respect and mutuality, as representatives of the AERS consortium universities and of the SSCN management group, the co-leaders retained the legitimacy and authority in decision-making and action in relation to these and other matters at all stages. To the benefit of themselves and the work of the policy review group, through their established networks of participation in the AERS and SSCN management groups, the co-leaders of the policy review group had the ability to draw on previously established bonding social capital, characterized by Hargreaves (2003) as 'know-who' (17). Augmenting and complementing know-who, these types of established bonding, bridging and linking connections of networks, norms and trust at the individual, professional and national structural and systems' levels equipped the leadership with the additional capacities of 'know-what, know-why...know-how' (17).

The members of the policy review group accepted the practices of collaborative knowledge generation introduced by the leaders and strived to make them work by investing time, effort and commitment in the review activities and in the collaborative report writing. The co-leaders initiated and engendered norms of respect for diversity, participation and collegiality in the group's activities. For example, a respondent noted that the leaders:

Spent time trying to ensure inclusivity and balance – that is, to ensure that no one felt left out or the policies they wanted to review were not taken up.

In the view of another respondent, the review:

Required closer cooperation and discussion among participants than I have been used to. This requirement was enhanced because participants came from different backgrounds and therefore were obliged to clarify the grounds of their thinking, their starting points. This, therefore, required careful management to ensure that we were aware of each other's (strongly held) views. The process was marked by such management. Nevertheless, it remains my impression that one or two of those participating were unable to recognise that their fundamental beliefs could be 'placed on the table'.

The allocation of time resources to participants, in particular the limited focus on 'lead-in' time for group bonding, appeared to restrict the formation of strong bridging and linking connections and networks likely to persist beyond the life of the policy review activity.

Respondents spoke of the need for time to reflect together and to 'gel':

We needed time to debate the concepts of social capital, to reflect on this and then to look at the policies. However, I think we did do all of this but in a rushed way. We would have benefited from more debate and reflection.

This group drew from individual and collective strengths bit this took time to unfold and develop.

Collaborative aspects need a lot more time – given the distances needing to be travelled in terms of geography, ideas and concepts – not least for the group to gel.

One respondent identified positive and negative effects due to a greater emphasis on collaboration:

A broader range of interpretations and experiences were useful in elaborating the review. I learnt things from the way others saw the reports about the implications for practice, and about connections with other policies about which I was not then familiar. However, the process was slower and there was some additional effort required to maintain communication.

In the view of one respondent, a collaborative aspect was not evident in the review processes:

In my opinion a huge opportunity for real collaboration was missed.

The strong bonding ties between the group leaders, based on a prior knowledge of and identification with the project, and an understandable, if 'managerialist', shared concern to 'efficiently and effectively' progress and complete the work, may also have inhibited opportunities for the formation of stronger bridging and linking ties between and among participants and the kind of strong connections of social trust which can actually 'reduce complexity' (Sachs, 2003, 139).

How were shared norms and trust built through the network's activities?

The type of collaborative research endeavour envisaged in the SEED/SHEFC call for bids and enshrined in the AERS award, what Ozga (2006) conceptualises as 'the redesign of knowledge production in education in Scotland' (9), may perhaps have been unthinkable in the previous competitive and exclusive research culture in Scotland. While attempting to reculture Scottish research practices at a systemic level through the AERS project's structures of collaborative research and knowledge exchange constitutes a most worthwhile endeavour, the project, premised on inter-institutional research restructuring towards collaboration, is also risky – which implies the need for high levels of trust - and demands flexibility on the parts of both its funders and implementers. Writing of the cultural and structural difficulties inherent in systems change initiatives, Sachs (2003, 118) cautions that

reculturing and restructuring are two complementary processes in any...reform

initiative, one has to precede the other to ensure a successful reform outcome...restructuring before reculturing often met professional resistance...Flexibility in terms of timelines and expectations goes hand in hand with professional and cultural readiness (118).

In the view of one respondent the collaborative review process was something innovative. This response also suggests that in the AERS initiative restructuring had preceded reculturing:

From my experience it was innovative and I was amazed at how well the group worked despite not everyone knowing each other.

Another respondent remarked:

As this was the first, it was different for me personally, can't say it is new for [others in the group].

While a different respondent did not view the review group processes and activities as a new way of working:

Apart from a larger team meeting to discuss things [this review was] the same as other reviews ...previously undertaken.

Other respondents felt that this review was different in character in a number of respects from other reviews in which they had previously participated. For example:

The policy review was eclectic – not just from the sectors people cane from but also in terms of the levels of engagement people had with concepts of social capital.

With other review groups, people round the table are either at the same starting place and probably have a more focused task. This means such a group is able to progress more quickly and possibly interrogate review items more robustly and with more depth.

Our common interest coalesced around our belief in policies needing to draw on the views of people to ensure relevance and appropriateness. I think it is rarely done, to

bring people together from different backgrounds, disciplines, perspectives and beliefs to engage with an idea.

For system level re-structuring around networks and norms characterized by bridging and linking relations of trust to sustain, this analysis suggests that culture, and, in particular, cultural readiness, including early attention and intensive efforts to re-culture practices, does count. One respondent suggested that such cultural readiness to include policy users in policy review was not evident:

It could be argued that the process was quite traditional in that it did not find any means of involving those most directly affected: pupils and parents. Despite the rhetoric of social capital pupils and local communities remained the object of reference rather than being in any way active participants. There is now considerable work on inviting young people [to participate] in research both as contributors of information and as active critical participants: this could be drawn on in future.

It will remain critical that the dimensions of power, critically including the macro- and micro political dimensions, operating in such national applied research projects are closely scrutinized. For example, who holds the right to initiate, to act and to legitimate the content and processes (Bishop and Glynn, 1999)? Critically too, the distribution of benefits from the transformed relations and positional ties which are constituted in this type of collaborative research initiative will need to be carefully examined. While there seems to be general agreement that the time is right for this type of national collaborative research endeavour, it is important that the form that such projects take provides worthwhile benefits all. For example, the balance of power and the benefits accruing to participants from the non-consortium universities and other participant groups, including the funders, in relation to their time, effort and other resource commitments will need to be monitored. Of the potential national benefit of a more open policy arena which harnessed wider contributions, one respondent remarked:

Perhaps if policy and research communities were more inclusive, we would have less policies and research reports but what there were would be more effective.

If the social capital, the networks, norms and trust, formed in such national projects is not to operate to reinforce consortium group bonding capital, consolidating previous bonding

networks, norms and trust, then innovative efforts and adequate resources will be needed to equip researchers from non-consortium institutions with the research training and time and other professional resources needed to connect into such transformed research practices and relationships and to actively participate.

What were the network's norms of knowledge exchange and how did these operate? The aim of AERS to increase research capacity nationally was addressed in both the content and processes of the collaborative research undertaken and produced by the policy review group across a number of indicators. For example, in the research activity in the review the participants individually and collaboratively developed skills and experience in literature sourcing and review, including developing protocols for selection of documentation for review and frameworks for analysis. In the view of one respondent the collaborative nature of the project and the instances of knowledge exchange that collaboration engendered was the most important aspect. This respondent noted that what was different from other reviews in which they had participated was:

The collaborative aspect of the process from setting up the agenda/framework to undertaking the review and the involvement of practitioners and academics.

For another respondent the pace of work seemed to inhibit effective knowledge exchange – or even knowledge transfer – at this stage:

It did seem to me like a new way of doing research and I'm not sure I initially understood what the plan was...I felt I was not grasping what the research was aiming for....Only recently as the case studies are commencing do I feel that I see the value and potential of the [review]. ..I found it difficult to come to terms with the uncertainty about the outcomes of the research.

Members of the group then undertook individual and collaborative policy analysis and collaborative multi-author report writing, and in so doing, developed bridging and linking social capital at the individual level which remained available to participants during the lifetime of the activity group - although, to date, not beyond. In the view of two respondents, new practices of knowledge transfer or exchange were established in the review processes:

The face-to-face [meetings] were very productive, particularly with the varying professional perspectives within the group. Personally I found this way of working stimulating and thought provoking. The discussion examined topics in relation to social capital which I had never had the time/had the opportunity to consider in depth e.g. diversity, community planning.

The commitment that research would inform policy was new, given the recent history of educational research funded by public bodies i.e. largely evaluating existing programmes; possibly new also in the extent to which in theory it required participants to open up their own views for the critical consideration of others.

In such practices of 'critical consideration', it may be claimed that the network engendered the fundamental practices of scholarship. More widely, through shared reading and shared discussion, participants' knowledge and understanding of policy contents and contexts was developed - including raised awareness of current national policy development processes and arenas. The SSCN Policy Review (2005) notes that:

The context in which a policy report is written...is important. There has been a history over the past two decades in which the explicit culture has been one of central intervention through very detailed specification of the major curricular structures with monitoring directly by Her Majesty's Inspectorate of Education and indirectly by education authorities of the implementation of these within schools...it has induced a climate in which teachers and education managers have come to see their role as largely carrying out the decisions taken by others...outwith the school (5).

With a shared belief in 'policies needing to draw on the views of people to ensure relevance and appropriateness', participants' experience of this review was somewhat different:

We came up with a review report which could be accused of being broad rather than deep, fragmented rather than coherent, but I think it provided a step forward in that it was the result of a range of discussions from different perspectives.

Participants' knowledge of how to engage with policy and how to apply an analytical frame of social capital were developed through the processes of engagement which the work of the

group afforded and the SSCN Policy Review (2005) documents in detail some of the knowledge which was collaboratively generated by the group.

Reflecting on the changes in thinking engendered by the review, one participant spoke of the contribution to new thinking around issues of inclusion, equity, children's rights and integrated children's services:

I find it more helpful to think in terms of changes of paradigm, which may be conceptual and/or realised in practice...the commitment to inclusion... equity...the rights of the child, in terms of the development of integrated children's services. This policy network contributed to taking forward such conceptions.

Another respondent recognised the need for all 'sectors' of the national policy community to be represented and to participate throughout the life of AERS:

The involvement of colleagues who were practitioners and colleagues who were academics/researchers was significant. However, one might pose the question as to the extent to which the policy community was involved directly rather than as a potential audience...I suspect it would be helpful if we were to try harder to ensure the presence of representatives of all three communities throughout such a project.

Producing this range and quality of knowledge generation and exchange, it seems that the research activity in the policy review helped to foster and develop participants' capacities for a particular form of research and learning that builds bridging and linking social capital relationships with a wider, more varied set of people.

One respondent hesitated to characterize the practices of knowledge transfer or knowledge exchange identified above as solely 'transformative', stating:

I remain hesitant about attributing to any single programme or development sole responsibility for transformation; rather I tend to think of various streams heading in roughly the same directions until they are so powerful as to wash away and reform the existing terrain.

A different respondent commented:

I don't feel that there will be any transformations.

The same respondent continued to say that the most important result of collaborative policy review by this kind of national group would be:

To see real changes in place in teaching practice.

Another respondent felt that the review processes constituted 'an extension of my preferred style' and so did not consider such practices 'transformative' either in terms of changing how the participants will now do research or how education research is done in Scotland, stating:

In relation to knowledge or personal being... My answer is NO... I feel that 'transformative' is too grand a term for the acquisition of new knowledge.

It is uncertain whether this respondent, while rejecting the term 'transformative', felt that new knowledge had been acquired by themselves or others. A different correspondent was initially similarly dismissive of the notion that such national collaborative review practices might be potentially 'transformative' either for individual researchers or for Scottish policy review practices commenting:

That seems quite a grandiose term to use for what is essentially good practice, I would have thought.

However, the same respondent subsequently recognised that the review constituted a new way of doing research in one respect, in building research and capacity:

On other projects I have worked with teams of a similar size – however this was a conscious attempt to develop capacity, which I guess does make it a bit different.

In the view of this individual, the research linked people who occupied different knowledge, power and status positions in relation to research capacity and previous research capabilities. Regarding the potentially transformative nature of the research, a third respondent noted some

beneficial effects of the bridging and linking ties forged in the activity, commenting:

I feel it was an excellent way of constructing new knowledge informed by diverse views, values, attitudes and perceptions. Contributors came from a wide range of professional backgrounds...several were inexperienced researchers and had no preconceptions about hoe to carry out a policy review. On reflection, the more experienced members of the group were perhaps deliberately setting out to 'transform research methods', taking the opportunity the AERS scheme afforded.

In response to the question: did it seem to you that we were engaging in new ways of doing research? One correspondent replied:

YES, especially with regard to the collaborative aspect of the process [throughout] and the involvement of practitioners and academics.

The same respondent went on to say:

I do feel from my own perspective my short involvement made me feel that it would be a good model to explore further in other contexts, for example in the policy context that I work in.

It might be argued, following Edwards *et al* cited in Field (2003), that the loose linking networks which characterize AERS network activities, such as the patterns of activity and flexible types of participation in knowledge generation described here, develop capacities for particular forms of learning. Such loose linking networks may, for example:

foster reflexive learning, as well as promoting the acquisition and development of reflexive practices themselves, since 'flexibly structured networks...allow actors to perform and position themselves in exchangeable roles and settings (146).

For some members of the policy review group, learning the norms of networking through associating in the loose bridging and linking characteristic of this group, may have transformed their knowledge about how to do research, with important effects for them and their home institutions' networks. The network patterns of activity and flexible types of participation in

knowledge generation characteristic of this group may have promoted research competences best suited to change and so have equipped participants with valuable experience skills and knowledge on which to draw in future national and local educational research restructurings.

Discussion

This analysis of the operation of the policy review group using the analytic of social capital would suggest that in this kind of national research re-design there are important issues and questions in relation to implementation and sustainability of new research networks that need to be considered. In particular, for collaborative research practices to persist beyond the life of the AERS initiative additional bridging social capital will need to be built, for example, in and through future local projects that address researchers' geographical and travel time constraints to include a wider range of stakeholders in education and children's services from across Scotland. Future national collaborative research reform projects will also need to ensure good linking social capital - the adequately funded and resourced participation of wider numbers of facilitating institutions and agencies across Scotland to ensure that the voices of all stakeholders in education, including those of children, young people and families, are included and heard, and that their views are valued and used appropriately to inform educational policy.

In any system wide redesign and restructuring initiative of this kind there are important questions pertaining to reculturing and the issues of politics and power which underpin research reculturing which need to be addressed. It seems incumbent upon those undertaking any future evaluations of the operation of the AERS programme and its effects for national educational research reculturing to consider how the dimensions of politics, knowledge and power currently operate in research relations, and how these might be fruitfully transformed for the wider national benefit. Hard questions may need to be asked, including, for example:

- Initiation: who sets the Scottish educational research agenda and according to what/whose interests?
- Benefits: who benefits from retention of the *status quo* or any form of research restructuring?
- Representation: whose cultural and political aspirations, preferences and prejudices are
 privileged in specific networked/collaborative or mono-institutional/competitive research
 practices?
- Legitimation: whose realities and experiences are legitimate in current and in redesigned

forms of research relationships?

- Accountability: who decides what constitutes appropriate knowledges and practices in the current moment and in any research restructuring?
- Knowledge: what forms of knowledge and/or efficacy are needed in current research practices, to change current research practices and for changed practices to be sustained?
- Imperatives: who is expected to act to transform the research culture?

(adapted and elaborated from a typology developed by Bishop and Glynn, 1999).

If, as in the work of the policy review group of the SSCN described above, the practices of educational research in Scotland will in future be characterized by norms of inclusive, democratic and socially critical practices that are networked and collaborative then work must continue to develop active local social capital - bonds, ties and links - within and amongst clusters and networks in all geographical areas of Scotland. It will be critical too that any changes to structures and systems are fully inclusive of all stakeholders in education in Scotland within and, importantly, beyond the current bonding social capital among some universities' departments of education. Within universities, differentiated schemes will be needed to establish the kinds of bridging and linking social capital that will bring in relevant staff at all levels working across the public services who have an interest in children's services reformations. Critically, future Scottish educational research developments will need to build securely on the current AERS' initiatives to develop bridging and linking social capital connections to include community, voluntary agency, professional association and other groups in a reconceptualised 'big tent' of educational research. Such spaces for conversations that are currently reinvigorating and remaking the discourses of education will continue to be needed.

Conclusion

This analysis would suggest that the processes, strategies and approaches of this policy review activity within the SSCN of the AERS project offer potentially fruitful re-conceptualisations of educational research practices as collaborative rather than competitive – albeit the demands of the Research Assessment Exercise (RAE) may again engender competition. Using the discourse of social capital, such collaborative practices can be viewed as creating new bridging and linking social capital among the Scottish educational research community, moving away from the previously safe but restrictive bonding ties engendered in a competitive education

research arena. But, as indicated above, the effects of politics and power are critical in any exercise to transform research culture. The warning in Jones (2007), quoted above, and others regarding the need to 'redress the excesses of competition' (107) to temper the effects of policies such as the RAE that produce a highly competitive research culture are timely. Therefore, the response to the outcome of RAE2008 by the Scottish Government, research funders and the successful institutions, will have important effects for the continued collaborative building-up of Scottish educational research nationally - or for 'winners' competitively taking all and 'losers' going to the wall, at least in terms of those institutions' research development.

For networked collaborative research culture and practices to become embedded in thinking and future practices in the Scottish system it will be important that shared spaces for bridging and linking, such as the variety of national forums and seminars which the AERS project established, continued to be created. In such spaces, underlying assumptions about research practices, 'expertise' and demarcations of practice might be examined and education practitioner groups and networks might continue to develop the culture of bridging and linking and engage in 'boundary work' and thinking outside the box, practices initiated and supported by AERS and the SSC network activities such as the one described here.

In research relationships that seek to be democratic, inclusive and collaborative, individuals may question the norms of their current research practices, actively engage in change, build bridging and linking social capital and take risks in collaborative research relationships. A policy arena in which more people are more politically engaged and more effective at communicating can only be of benefit to Scottish civic society. Finally, activities that bring researchers and practitioners together to generate knowledge about collaborative research practices may provide timely opportunities to productively address some of the issues of politics, culture and power relating to the distribution of capacity and benefits which are identified above.

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Appendix: membership of the policy review group

Rowena Arshad, University of Edinburgh.

Colin Campbell, Assist Social Capital.

Ralph Catts, Applied Educational Research Scheme (AERS).

Joan Forbes, University of Aberdeen.

Philomena de Lima, University of the Highlands and Islands (UHI).

Ian Menter, University of Glasgow.

George McBride, Govan High School.

Grace Paton, University of Paisley.

Veronica Rankin, Educational Institute of Scotland (EIS).

Terry Wrigley, University of Edinburgh.