# Researching "What Works' in Boys' Education: Teachers take the lead

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## Introduction

Accountability in education is often effected through mandated standards for curriculum, teacher performance and student outcomes at national or state levels, and this has increasingly occurred in Australia over the past decade. In order to make decisions regarding the achievement of these standards, evidence must be collected from sample sites or segments of the relevant populations. Funding is often linked to accountability, through reward mechanisms 'after the event' or through grants made a priori and requiring comprehensive reports. The evidence base is large-scale, but can lack detail. In conjunction with these levers for schools to act on current issues, their autonomy to make local decisions that assist them to meet the standards has been promoted, as policy makers recognise that local input not only increases the motivation of teachers, but allows them to contribute their contextual expertise to solve big problems. Since these problems generally focus on students' needs, teachers have the local authority to take immediate action, while providing evidence of their experience to inform policymakers and other practitioners.

Within this context, the Australian Government has recently funded projects intended to improve the academic and social outcomes of boys (Boys Education Lighthouse Schools – BELS), while contributing to the knowledge base around boys' education. This paper suggests that between accountability and autonomy there exists a space that can be used for building knowledge within developing communities of practice, and that in this case, the BELS projects facilitate the connection. Using an approach that incorporated both evidence-based approaches to document 'what works' at a broad scale (Slavin, 2002) and methods drawn from action research (Kemmis, 1999), the BELS projects were substantially resourced, with more than $AUD 5 million allocated to local projects in 2004-5. Organisations were selected by tender to manage the projects, and over 350 schools in fifty clusters around the nation were chosen to participate. The authors of this paper were members of the management team for parts of the BELS project period.

### Problematising boys' education

The problematising of boys and their learning in Australia stemmed from statistics and reports that identified worrying aspects of boys' learning and behaviour. For example, retention rates for boys were lower than for girls; on average, boys were performing at lower levels than girls; more boys than girls were deemed 'slow starters' at literacy; and fewer males than females entered higher education. Even so, one report concluded that with regard to gender and other variables, socio-economic status is actually the most significant factor (Collins, Kenway, & McLeod, 2000). A more fine-grained analysis, (Alloway & Gilbert, 1997; Teese,

1997) suggests that boys should not be treated as an homogeneous group. Those particularly at risk appear to be boys from working class areas, Aboriginal boys, and those from homes where the first language is not English (West, 1999). To address these problems, the Inquiry into the Education of Boys asserted the importance of a strong foundation of literacy and numeracy in the early years of schooling, supporting male relationships in school, and the availability of male role models (Commonwealth of Australia, 2002).

In spite of the diversity of views on this issue, many educators and researchers agree that boys share common experiences in Australian society, and are likely to be influenced by dominant discourses of masculinity. In one report, based on research with 1800 male secondary students, Trent and Slade (2001) recommended systemic changes, research into the nature of learning environments, and a better understanding of good teaching for boys. Alloway, Freebody, Gilbert and Muspratt (2002) called for more empirical inquiry into the ways in which these discourses affect the life and learning of particular boys in particular contexts, including ongoing observation and analysis by teachers and researchers. The model described below was an attempt to conduct such inquiry in conjunction with teachers as the leaders.

**Connections between Teachers and Academics as Researchers**

Teachers have long had autonomy over the specific detail of their practice wherein they demonstrate expertise. They have been less frequently involved in researching (reflecting on and theorising) this practice, a situation that surprised Piaget (1969), who thought they would be keen to research pedagogy as a discipline from the practitioner's point of view. A teacher's research involvement from different experiences can contribute to enhancing the teaching-learning process, while a practitioner's living theory can make valid contributions to educational knowledge (Whitehead, 1989). This has been acknowledged by the Teacher Development Agency (formerly TTA) in the UK, which is keen to promote teaching as a research-based profession (Everton et al, 2000).

Collaborative practitioner inquiry has been successful in researching the teaching and learning practices of classrooms (Kemmis 2000; Sachs, 1999). A successful and effective partnership orientates itself towards collaboration and a unified sense of what is right and what works in a dynamic and innovative learning environment (Furlong, Barton, Miles, Whiting. & Whitty, 2000). But the culture of teacher isolation and academic autonomy can work against collaboration in practice and evidence-based research protocols. For teachers and researchers to work together to comprehend and capture what is happening can be difficult for teachers who are more likely to focus on practice. However, Hartnell-Young (2003) found that teachers in a supportive situation were able to focus on classroom practice while working with researchers to interpret and finally document the outcomes.

Researchers are generally not the agents of accountability, but often play a role somewhere between autonomy and accountability, particularly where they conduct funded evaluations and other policy-oriented projects. Their language and context is generally different to that of teachers. It is important to reflect on evidence from both research and practice as it can reveal tensions and gaps in understanding between the two fields, thus providing opportunities for dialogue and dialectic. Such opportunities are vital if teachers are to make informed judgments. The active participation of practitioners in researching and reporting their findings about their own teaching-learning process is essential for academic researchers in understanding how teaching affects learning.

In a study based on collaboration between practitioners and academic researchers it was found that apart from the accountability language of standards and outcomes, teachers did not share an explicit and agreed language of learning to value and present their work (Cherednichenko, Hooley, Kruger, & Moore, 2001). Over a period of five years, the research team identified the development of a discursive environment, where teachers were able to talk about their actions. This environment also encouraged argument and critique. Developing and expanding a shared language to include multiple stakeholders would be a further step towards a democratic approach.

The projects reported here incorporated collaborative practitioner inquiry that enabled teachers and research partners to generate both practical solutions and research findings, with the intention of informing the decision-making that affects the teaching-learning process. The connection to classrooms provided a case to recognise organisational and social structures from their real-life experiences. Researchers working with the teacher practitioners in their own school settings sought to identify, support, develop, implement and research effective strategies that responded to the learning needs of boys.

Cochran-Smith and Lytle (2001) suggest an approach whereby teachers learn when they generate local knowledge of practice within the context of inquiry communities and connect it to larger social, cultural and political issues. They call this 'knowledge-of-practice', and argue that the inquiry stance is a fundamental way in which teachers, both experienced and inexperienced, work together to generate local knowledge, envision and theorise their practice, and interpret the theories and research of others. However they do not go so far as to suggest partnerships between teachers and academic researchers, or the involvement of a broader constituency. Bereiter (2002) goes further to argue that bridges must be built between teachers and researchers if teaching is to become a modern profession, leading to a new 'hybrid' culture of teaching and research. The role of researchers, he suggests, is to aid in the evolution of ideas, by selecting, intelligently, the novel ideas that emerge from practice. This requires being close to the action, and deeply involved while at the same time having a large view, with the background knowledge and time to reflect. One way in which this could occur, we suggest, is through communities of practice (Wenger, 1998), in which teachers and researchers interact with a shared purpose in a particular domain of practice.

Wenger suggests the characteristics of communities of practice include sustained mutual relationships, shared ways of engaging in doing things together, rapid flow of information and propagation of innovation, and knowing what others can do. Hence, we considered the BELS Projects as having structures that incorporated collaborative practitioner research within developing communities of practice. This enabled the classroom teachers and research partners to provide cases and share in the research findings that affected the teaching-learning process for boys.

**Method**

The conceptual model for this paper posits a space between accountability and autonomy in which a framework of tools and technologies supports the development of communities of practice and leads to substantive knowledge. Figure 1 shows how this relates to the characteristics of autonomy and accountability outlined previously.

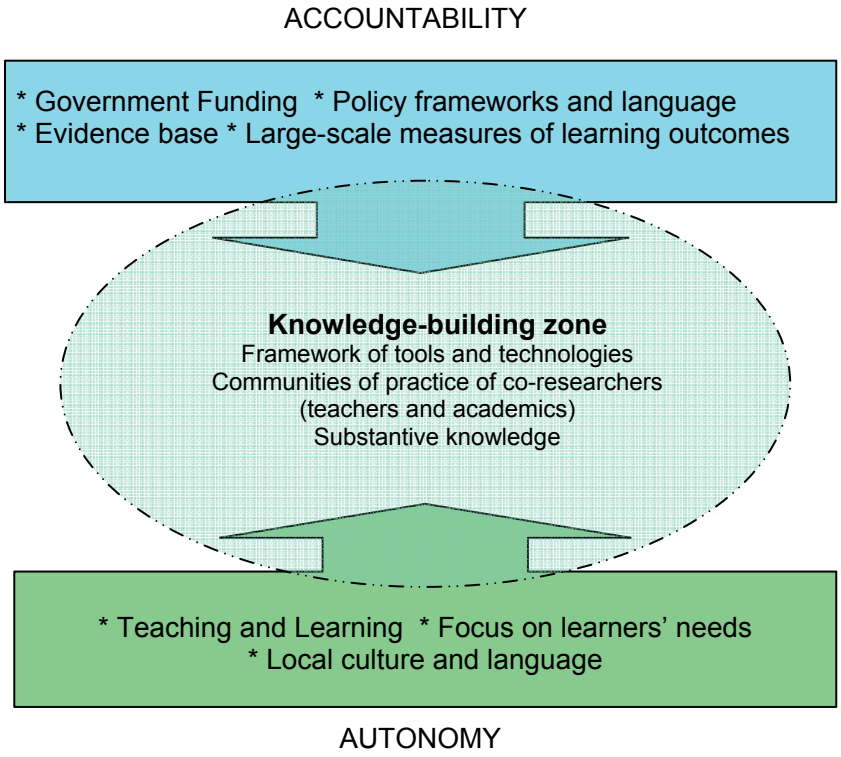


**Figure 1: A knowledge-building zone between accountability and autonomy**

In this section, the project method is described in detail, while the method of analysis of data for this paper is described at the end of the section. The project framework encouraged data collection and reflection and assisted teachers to undertake their own research through treating their own ideas, theories, practices and work settings as important areas for analysis and critique. Teachers were both practitioners and co-researchers, in partnership with academic consultants. They were in turn supported by the national management team, which was able to balance context-specificity with reflection on the projects at the broadest scale.

The tools and technologies included a website populated from the outset by the management team with a strong evidence base. Structured templates were also provided, and schools were required to plan and record their projects using four reporting documents entitled Your School Project (YSP) and Your Cluster Project (YCP). Two cycles of documentation were completed by each cluster, and after quality assurance, these were published on a website specifically created to disseminate and share reports and research undertakings
YCP Stage 1 required schools to describe the cluster context and distinctive features of the project. This document included goals and targets, an explanation of the rationale for the project, and how available resources were to be used.
In YCP Stage 2 clusters identified assessment tools and data collection strategies to monitor and measure the outcomes of the project. It was expected that an evaluation strategy would be in place and baseline data collected at the commencement of the project, so that improvement could be measured.
YCP Stage 3 provided guidance in identifying the strategies and processes to be used in implementing the project. Clusters indicated how they would address the relevant NQSF dimensions of quality schooling though their projects, and any additional resources required to support implementation.

YCP Stage 4 provided a structure for presenting, reviewing and analysing the data and evaluating the outcomes of the project and its impact on student learning. Clusters were encouraged to include both qualitative and quantitative data.

Pressure and support (Fullan, 1993) were built into the project design at the national level. The pressure of the reporting framework constituted a form of local accountability to other schools in a cluster, as well as meeting the government's requirements. Grant payments to clusters were linked to the completion of the reporting documents, while under the terms of the contracts, schools and clusters retained copyright over all contents added to the forms.

Support was offered through several face-to-face workshops for every cluster, where the researchers met and worked with the teachers. Workshops focused on developing the cluster capacity to achieve the project outcomes; the evidence-based model underpinning the documentation; how to collect and analyse qualitative and quantitative data; and writing of cluster documents. Local project consultants chosen by the national management team were employed to give teachers support to identify appropriate data, analyse it rigorously and write for the audience of practitioners and the education community nationally. This was intended to provide an evidence base of substantive knowledge of boys' education for future work, and contribute to a shared language. Clusters could also use their funds to buy in other external support people for specific projects.

Our focus in this paper is to analyse the extent of the development of communities of teachers engaged in research into their practice, and to do this we considered the reports written by participating clusters and published on the web site. The reports were analysed according to three questions: How do we come together? Who are we and what are we working on? How does our project improve knowledge and influence others? These questions were based on Wenger's (1988) very detailed architecture of learning. Table 1 shows a summary of the themes that we considered within each question, and it can be seen that some themes relate more to autonomy (eg. shared discourse, trying new practices) while others relate more to accountability (eg. rigour of data collection).

**Table 1: Elements of a community of practice**

| **How do we come together?** | **Who are we and what are we working on?** | **How does our project improve knowledge and influence others?** |
|---|---|---|
| Meeting face-to-face and online | Sense of location in a wider world | Vision, leadership and management |
| Shared discourse | Shared project focus | Rigour of data collection/analysis/reporting |
| Disseminating professional knowledge | Trying new practices | Linking with other communities |
| Commitment to sustainability | Evidence of reflection | Influencing decision-makers |

(based on Wenger, 1998)

As clusters reported their experience and gave advice to others through the YCP documents, they built a body of practitioner knowledge that could be useful for policy-makers, practitioners and researchers. The examples in the next section, which focus on the processes of their learning in communities, were taken from cluster reports (the YCPs and YSPs), identified by pseudonyms.

## Findings

The local BELS projects discussed here were designed to focus on learning outcomes for students, and these were reported in the documents provided by each cluster. In addition, through engaging in the process of inquiry into local issues, in conjunciton with academic consultants, teachers in schools and clusters around the country reported that they had experienced enormous professional growth. One cluster asserted that 'developing teachers is the first, and foremost, outcome in any project that seeks to achieve long term success for boys in mainstream schooling' (Acacia Cluster, YCP 4 2005). Using the three questions above as a guide, this section considers the ways, and the extent to which, the community space was used to research and build knowledge of practice around the education of boys.

***How do we come together?***

The funding enabled schools to release teachers to work together, and many reports indicated that professional learning teams had been established at individual school level. These teams used regular meeting times to share and reflect on practice, as did representatives of metropolitan clusters who were able to travel to other schools. Rural schools had more difficulty coming together. Although most clusters were based on geographic proximity, due to the size and density of Australia's population, some clusters comprised schools located hundreds of kilometres apart. Two national clusters, made up of schools in several states, arranged for large numbers of staff to meet at occasional face-to-face conferences, while regular teleconferences and email were used to maintain contact throughout the project. The national website, developed for the project by the management team, had the purpose of disseminating the existing evidence base, updating it with emerging professional knowledge-of-practice (Cochran-Smith & Lytle, 2001), and providing a space for synchronous and asynchronous interaction between teachers and researchers.

Several schools and clusters reported on the value of shared discourse, which can include students, teachers and parents. One school that implemented a specific project to improve students' behaviour and motivation reported:

> *Program Achieve* language is now used daily by teachers at any opportunity that presents itself. As it is common language across the school, all teachers are able to use it with students. From observation students are increasingly using it themselves to reflect upon their behaviour and articulate it during follow-up conversations with staff and parents. (Brolga Cluster, YCP 4 2005).

Teachers reported that coming together to learn something new, and then continuing to use this knowledge, had an impact on culture and student outcomes. A cluster of sites in different states of Australia, focusing on spoken language skills for students, reported that a common language to discuss and implement the project created a more positive attitude (Crocodile Cluster, YCP 4 2005), while another national cluster looked at moderation of student written work as a process to enable conversations between teachers to build a common understanding of boys' writing (Dingo Cluster, YCP 4, 2005).

As they gained in agency and autonomy teachers in the project realised the importance of sustaining the gains they had made. One cluster wrote:

> Probably the most overwhelming finding from our pilot was the impact of using classroom projects that have an authentic purpose, and linking with the community as

part of those projects. These features will be definitely be pursued. (Hawk Cluster, YCP 4 2004).

The role of researchers, he suggests, is to aid in the evolution of ideas, by selecting, intelligently, the novel ideas that emerge from practice. This requires being close to the action, and deeply involved while at the same time having a large view, with the background knowledge and time to reflect.

***Who are we?***

Individual cluster projects used various strategies to create a sense of identity, and the value of focusing on projects owned by students and their local communities was realised in several instances. These included connecting curriculum to community action such as painting a bus shelter, producing a regional youth magazine, and community service programs including building construction projects and repairing bicycles. One project in a relatively isolated community, aimed to enable boys to perform confidently in music and dance activities, in speaking situations, and in communicating the project to the community using a range of ICT and other skills. A survey at the end of the project showed marked improvement in scores pre- to post project, particularly in music, dance and public speaking, and the number of boys involved in public speaking increased as the project developed. Another cluster devised a survey to measure community views to address their goal of community connectedness, and recorded positive results in key areas. Ninety-five businesses were contacted via the project and classes worked with 20 real life enterprises marketers.

In creating a sense of professional identity among the wider education community, some clusters used statewide frameworks such as dimensions of teaching, to plan their projects. Others valued the opportunity to work side by side with academic researchers, and to present at conferences and publish. One cluster reported:

> Over 200 teachers attended and all of the cluster schools provided a workshop. This was an important professional development event for the schools in this cluster; many had not previously been involved in cluster event such as this; many had not previously presented their work outside of their own school context. The conference evaluation indicated that teachers really enjoyed hearing from their colleagues. (Numbat Cluster, YCP 4 2005)

One cluster tried a range of new practices to engage Aboriginal boys, including role models who assisted in offering moral, behavioural and attitudinal guidance; explicit teaching to improve literacy; regular interschool activities and meetings to build inter-community strength, as well as activities designed to promote connectedness between the target boys, their peers, their classroom, their school and their wider community. Student reflective journals consistently recorded positive feedback on the program. A survey found that students thought the projects were interesting and impacted their learning and teaching programs well. Their general feeling about schooling was positive, and there was decrease in unexplained absences and suspensions from school. (Magpie Cluster YCP 4 2005).

Teachers in another cluster reported an improvement in their teaching due to the use of reflective journals and opportunity to analyse those observations. In the words of one teacher:

> The research project led me to examine more systematically what works. I know that I certainly made improvements to my teaching practice regarding grammar. I have learnt more child-centred strategies that fit in naturally with their developmental needs. (Stingray Cluster, YCP 4 2005)

An action learning project requires teachers to try something new, and reflect on the outcomes. 'Teachers were most receptive to the hands-on approach to teacher in-service' reported Lyrebird Cluster, (YCP 3 2005), while Magpie Cluster concluded that 'Schools need to look outside the square to find ideas for improving outcomes for students, especially when barriers are identified' (YCP 4 2004). The element of reflection, encouraged particularly by YCP 4, showed many teachers that it was valuable to make time to review data, share progress and actually write about it. This was supported by funding to allow release from classes, and working with academic researchers to do so. One principal commented:

> It is often the part that we leave, we'll often try things as practitioners, go and utilise them in the classroom and very briefly we'll comment as to whether it worked or not. This project makes people critically reflect on what the important parts were. (Numbat Cluster, YCP 4 2005).

**How does our project improve knowledge and influence others?**

The collegiality of each project assisted in professional growth, strengthened by the external value of a critical friend. The partnerships within each cluster committed to evidence-based change in the teaching-learning process became the driving force for improved knowledge of practice (Cochran-Smith & Lytle, 2001). Many clusters recognised the need for sustainability, to avoid the demise of the project and its outcomes after the funding ends. To achieve sustainability post-funding is itself an element of autonomy. One cluster suggested that the shared leadership and collegiality attained through BELS would provide a basis for sustainability:

> Perhaps, now, a sustainable model of shared leadership can be created in each school in the cluster, so that teaching and learning approaches can be continually refined to support both boys' and girls' learning. (Acacia Cluster, YCP4, 2005).

Accountability beyond the cluster was manifest in two ways: the state government requirements that each cluster was required to address, and the project requirements itself (a Commonwealth responsibility). Internally the project required a rigorous regime of data collection in order to show the effect of interventions and new practices. Clusters used the state requirements to provide evidence of improvement, as one cluster reported at the end of the project:

> [statewide] test results indicated that boys performed above state and like school averages in all areas of literacy; the value added component of this was addressed through provision of five-year trend results from this school, which indicated a steady level of improvement from boys in all areas of literacy during the program. (Frillneck Cluster)

Clusters recognised that the resourcing of the project allowed rich professional learning to take place, and one termed the time and money available a 'luxury'. (Goanna Cluster YCP 4, 2004). One or two schools however, had expected that the funding would be provided with 'no questions asked', and were less interested in innovation. The rigour of data collection, analysis and reporting required of schools involved in this project was probably higher than in any previous projects they had undertaken. At first, some were overwhelmed by the task. However, as time went on, cluster reports indicated that teachers saw value in the process, and one stated: 'the group was able to break down the task into more achievable and realistic targets. The most useful tool in this process was the YCP report.' (Quokka Cluster, YCP 4 2005). This was also recognised as a tool to support professional learning about project

management, so that a cluster stated 'the use of the tools was an excellent way to review planning targets in our schools, not only the project goals but the other goals associated with the schools' directions' (Goanna Cluster, YCP 4 2004).

Those schools used to focusing on social competencies and emotional well-being were concerned by the rigorous approach, but some later acknowledged the benefits:

> For teachers unfamiliar with research and data this was a threatening proposition…we thought our commitment to social learning and well-being of students would be compromised. On reflection it was probably enhanced as we struggled with the connections between well-being, effective pedagogies and learning outcomes. After all, what is the point of spending a huge amount of time, energy and resources on enhancing well-being if we are not also improving learning? (Rosella Cluster, YCP4 2005).

On the other hand, even by the end of the project, some schools found the 'stringent accountability' a burden. (Echidna Cluster, YCP4 2005).

A true community of practice, says Wenger (1998), looks outward to make links with other communities and seeks to influence the world. Numerous clusters reported examples of crossing boundaries, including greater understanding between primary and secondary teachers, police and welfare agencies and visiting speakers. At a conference of Dingo Cluster, several teachers reported that their daily work was isolating, and they therefore valued national collaboration with teachers in a similar setting. One teacher reported on a locally-developed resource 'that is both useful for our school, that will be transferable to other like schools, and that informs education across Australia'.

While accountability regimes provide evidence to policy-makers, it is not clear how much this influences their decision-making, and teachers often feel they have little power. Following a conference organised by one cluster and attended by several others, a teacher wrote:

> It is hoped that this conference has had some impact on the way [the state government] devises policy on the education of boys in the future. (Numbat Cluster, YCP 4 2005)

**Discussion and Implications**

The BELS Projects incorporated collaborative practitioner research that enabled the classroom teachers and research partners to generate the research findings. By working collegially and collaboratively with practitioners in their local setting, with a critical friend from a university, and within a national framework they could identify, support, develop, implement and research effective strategies to respond to the learning needs of boys for improved learning outcomes. By using evidence gathered locally, they could identify which boys (and which girls) required particular support.

Many clusters focused on projects to improve literacy and improving relationships in school, including more use of male role models, as had been suggested by previous reports. A major outcome for many teachers was the realisation that the changes put in place, such as spending more time scaffolding tasks, improved learning for a wider target group of students that originally planned. One cluster reported, for example, that both girls and boys improved their reading age by as much as one year. In another, tracking of target students across the cluster showed improvements in results for boys overall, and more so in mathematics than in English. An improvement in student attitudes was also detected, with boys finding that school was more interesting than previously.

In many cases, teachers developed their own research tools, while in others they used commercial products. The tools developed within the BELS projects included a Teacher Capacity Self-Assessment Rubric (Rosella Cluster), covering areas such as knowledge of boys' education, confidence in implementing new approaches, and professional practice. This was developed and used by one cluster three times during the project as a tool for teacher learning. Here teachers researched and reflected on their practice, shared their results, and set professional learning goals. A similar rubric and a kit supporting students' spoken language was developed by Crocodile Cluster, which focused on increasing boys' capacity to switch language codes when dealing with people in diverse settings, an area that teachers believed affected but their ability to interact with others. The data thus collected provided baseline evidence for ongoing reflection and action.

Some schools, however, felt a lack of research expertise among the teachers, while in others, teachers had formal research skills gained through postgraduate studies. A number of Clusters used products consisting of ready-made strategies, with the expectation they would require little modification to suit their purposes. However this was not always the case, leading to some strategies being abandoned. Where teachers collaborated with external researchers, they were able to focus on their intervention strategies, although in some cases a lack of shared language hindered progress. Some clusters suggested that training in basic research skills would be helpful to future projects of this type.

At the end of the project, teachers reported some common issues that impacted on their ability to assess the effectiveness of their strategies, particularly noting difficulties in following through a group–especially when made up of 'at-risk' students–over the period of a specific intervention.

The call from Alloway, Freebody, Gilbert and Muspratt (2002) for more empirical inquiry into the life and learning of particular boys in particular contexts, has been addressed through the local examples of the large-scale work reported here. The knowledge thus created is in the process of being shared more widely through reports and other publications. In a broad sense, then, the project contributed to a national community involved in the practice of boys' education.

A common language and opportunities for a national discourse began to emerge during the project. The will to engage with others overcame the distance factor in several cases, particularly in the two dispersed national clusters. Many clusters spoke of their plans to sustain the benefits they had observed during the project. A common structure provided by the four-stage YCP framework, and the flow of information facilitated by the web site and email communication, helped in finding out 'what others can do'. The project provided an opportunity for teachers to identify shared concerns and amass a body of evidence that could have influence. However, as the political environment for education funding is uncertain, it is not clear to what extent the communities of practice developed to date will be supported in future.

This account of a national project in boys education could only be written because the methodology of evidence-based planning, data collection, project implementation and reflection allowed teachers to document their work in a common format around the nation, and share this through a national web site. The bank of evidence around boys' education has grown enormously, and a major outcome, it is argued, is the knowledge about the process of

professional knowledge building, illuminated by empirical research. Future partnerships of practitioners and researchers could implement this model at small or large scales, pooling their knowledge in global communities of practice. However the irony that this paper is written by researchers, attempting to take into account the views of the practitioners, does not escape us. We have not yet reached Bereiter's (2002) new hybrid culture.

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