

## Shared Ownership and Community Capacity Building

Peter Howard  
Australian Catholic  
University

Bob Perry  
University of  
Western Sydney

Jude Butcher  
Australian Catholic  
University

*The Mathematics in Indigenous Contexts project was undertaken in a rural Western NSW site from 2003-2005. The project demonstrated the potential of shared ownership of mathematics curriculum development among Aboriginal and non-Aboriginal community members as a way of enhancing the understanding and respect of each group for the other as well as developing the mathematical knowledge of primary and secondary students in the community.*

*In 2005 – 2006, the Building Community Capacity project sought to identify key aspects of meaningful engagement between schools and Aboriginal communities in the development and implementation of contextualised, relevant and connected mathematics curriculum and teaching and learning strategies to enhance Aboriginal students' mathematics outcomes. This project utilised the success of the Mathematics in Indigenous Contexts project in the rural western NSW site as the entry point for its investigation in this same site.*

*This paper describes the Building Community Capacity project, reports on the critical elements of community engagement which led to the success of the Mathematics in Indigenous Contexts project in the western NSW site and provides underlying principles which other communities might consider in their own community capacity building.*

### **Introduction**

The *Building Community Capacity* (BCC) project evolved out of engagement between schools and their communities in the development and implementation of contextualised and relevant mathematics learning and teaching units. This development resulted from of the Board of Studies NSW's project *Mathematics in Indigenous Contexts* (1999-2005) (MIC) which has been sited in both rural and urban communities. Each of these communities contain Aboriginal and non-Aboriginal people. A significant factor in the MIC project has been the explicit involvement and engagement of Aboriginal parents and communities in the development, implementation and evaluation of the project.

From 1999-2005, the Board of Studies, NSW in conjunction with the NSW Department of Education and Training, Australian Catholic University and University of Western Sydney, has worked with schools and community members at two sites: one urban site in western Sydney and one rural site in western NSW in the MIC project. These two sites were selected because of the significant enrolment of Aboriginal students in the schools. MIC focused on establishing a learning team comprising teachers, Aboriginal educators and local Aboriginal community people to develop contextual multistage mathematics units that suited the learning needs of Aboriginal students. The mathematics activities reflected each community's

knowledge, engaged the students in meaningful learning, created closer school/community links and brought cross-cultural groups together. An underlying principle of the project was having the school seen as central to the community, with community and school working together to develop curriculum which enhanced the knowledge and the capacity of the Aboriginal students, community and school. Building community capacity was a key element of the MIC project. The MIC participants included: Aboriginal educators; Aboriginal parents and community people; primary and secondary teachers; teacher mentors; Aboriginal and non-Aboriginal students; NSW Board of Studies personnel and university mentors.

MIC was based upon the principle that the mutually beneficial engagement of people and cultures is essential in developing a community's capacity for educating Aboriginal students. According to Matthews, Howard, and Perry (2003), "educating Aboriginal students requires Aboriginal and non-Aboriginal teachers to understand the needs and cultures in which each Aboriginal student lives" (p. 18).

### **Community Capacity: Setting the scene and identifying challenges**

The *Building Community Capacity* project acknowledges the critical importance of schools and communities collaborating to enhance the education of Aboriginal children and seeks to identify, from the success of MIC, guidelines for other community capacity building projects. MIC developed culturally appropriate learning contexts and outcomes for Aboriginal students in schools, and enhanced the capacity of the school and Aboriginal community to relate and collaborate in ways which empowered all participants to have a voice in the education of Aboriginal students. The BCC project seeks to analyse this success and encourage its generalisation into other communities and contexts. It does this by examining the:

- place of community capacity building within current political, social and educational contexts;
- nature of community capacity building; and
- challenges such community capacity building provides for teachers and communities.

### **Political, social and educational contexts**

*Mathematics in Indigenous Contexts* was funded by the Board of Studies NSW at a time when there were limited, if any, formal channels for Aboriginal communities to have a representative voice in local curriculum development initiatives. Within MIC, priority was given to the voices of Aboriginal people and students as an essential means to enhancing the cultural appropriateness and educational potential of learning goals and strategies for Aboriginal students.

This project was timely within the wider political, social and educational contexts. These contexts emphasise 'markets' – both corporate and community markets - as key determinants of school policies. Markets have become the ground in which ...

The rise and rise of the arithmetic as a social imaginary signifier (Castoriadis, 1997) has had a profound shaping effect on the way we construct our sense of self and our relations with each other. And so we may see that education is increasingly dedicated to the production of more goods and services; that is, for the economy. Number drives the economy, and the child's education is driven by number because her education serves the economy. So it is that the individualised person is a number in the mass. Education for the self (or the community) is

submerged in a discourse of number metamorphosed into the discourse of economic processes (Conroy, 2004, p. 6).

In the functional world of markets, learning targets for school, class and individual reports are used as a basis for benchmarks and measures which describe and report upon institutional and personal achievements for the market. Within this educational market place, learning and schooling goals for Aboriginal students and communities that value people and relationships need to be conceptualised and stated in ways which contribute to the learners' capacities and identities. Attending to the social and cultural meanings of learning goals requires learners and educators to participate in a discourse of exploration and engagement with cultures. Such a learning discourse is different in its goals and strategies from one based upon production and consumption designed to achieve closure in terms of benchmarks, competencies and testing.

### **Nature of community capacity building**

Community capacity can be described as the bringing together of the community's knowledge, skills, commitment and resourcefulness to build on community strengths and address community challenges (McGinty, 2002). Community capacity building involves both attending to the foundations of the capacity and taking the capacity beyond where it is at present. Attending to the foundations requires establishing the processes for engaging with community and exploring culture - in this case, Aboriginal and school communities and cultures. Taking the capacity beyond its present level involves both taking the community to different levels of the capacity and extending it to new forms of the capacity. The loci of the capacity building lie within and across both the school community and the Aboriginal community. Engagement that is respectful of and sensitive to the values of these communities and cultures is key to community capacity building.

While a primary focus for the capacity building is the students themselves, it also includes the students' families, Aboriginal community members, non-Aboriginal community members, teachers, Aboriginal educators, and other school staff. Enhancing the community's capacity requires that attention be given both to the capacities of the individual people, particularly the Aboriginal students, and to the capacity of the community as a whole.

### **Challenges of community capacity building**

Community capacity building means that school leaders, teachers, students, community leaders and members are involved in a process of mutually beneficial engagement through a discourse of relationships and exploration. Relationships of respect and trust are the gateway to effective engagement. School leaders and teachers are challenged in the first instance to move beyond the educational model of "teacher and taught" to one of mutual respect and engagement with the Aboriginal community as learning partners.

Community capacity building challenges schools and teachers to learning approaches which are based upon the mutual engagement of the school and the community. One of the criteria for quality teaching and learning (NSW Department of Education and Training, 2003) is that schools must move beyond approaches which assume that schools alone have responsibility for ensuring learning is related or applied to students' contemporary world and cultural contexts as. A second challenge requires educators to move beyond the triarchic model of minority children's school achievement which includes factors that educators can potentially influence (Okagaki,

2001). The leadership and power lie within and across the school and Aboriginal communities rather than with the school alone. The integrity of leadership lies in the capacity to engage and explore in an alternative and open discourse which will inform approaches to education and learning for Aboriginal students.

A third challenge for schools and teachers lies in their stance with respect to quantifiable measures of student capacities which are used as benchmarks for public reporting and accountability such as student attendance, progression and retention data, and Basic Skills Tests, Secondary Numeracy Assessment Program, English Language and Literacy Assessment, School Certificate and Higher School Certificate data. These 'evidence-based' measures, which report upon student behaviours, performance and competencies inform one's understanding of the learner and learning but do not define or bring closure to a student's capacity. In the case of Aboriginal students' learning, such 'informing' requires educators to consider a further register of indicators and evidence which are both informative and culturally inclusive.

A fourth challenge for schools and teachers is to engage with communities in a shared understanding of how home, community and school can work together in supporting student learning. Alton-Lee (2003) found that for most effective development of student learning outcomes there needs to be an alignment of capacities across student, teachers, and the school community as a whole. This requires teachers to value community contexts and their strengths. Schools and teachers are challenged to engage with the community and the cultural contexts of the students' worlds (Barton, 1994) in ways which impact upon school and teacher approaches that are aligned with these contexts. School leaders and teachers develop the cultural and educational alignment of school and community through enhancing their own capacity to think with the cultural perspectives of the students and their communities (Bernstein, 1996).

A fifth challenge underlying a school and teacher's capacity to enhance the education of Aboriginal students lies in teachers developing their own personal and collective efficacy for community engagement. Educators and researchers are challenged to see teacher efficacy as being multi-dimensional including not only their current pedagogical focus on teaching and classroom management (NSW Aboriginal Education Consultative Group Inc./NSW Department of Education and Training, (2004), but also their efficacy to engage with the community (Labone, 2004).

In summary, community capacity building for enhancing the education of Aboriginal students presents schools and teachers with the *five challenges* of:

- mutual respect for the Aboriginal community;
- mutual engagement with the community in developing learning approaches based upon alternative and creative discourses;
- evidence based discourses to inform one's understanding of learners and learning;
- mutual development of home-school-community alignment for enhancing student learning; and
- personal and collective efficacy for community engagement.

These five challenges pose a framework for engaging and exploring with the school and Aboriginal communities their community capacity building to enhance the education of Aboriginal students. A goal of community capacity building is a justice-based approach to Aboriginal education. Within the MIC project the curriculum focus of Aboriginal students' learning of mathematics was the specific vehicle for enhancing community capacity.

## **Methodology**

The *Building Community Capacity* project focused on three NSW Department of Education and Training schools in the two sites – a primary school in an urban community and both a primary and secondary school in the rural site. These schools were chosen based on the collaboration between the Aboriginal community and school in previous *Mathematics in Indigenous Contexts* activities. Each site identified an Aboriginal educator as the key project link between the school and the Aboriginal community.

Qualitative data about building community capacity through meaningful engagement in the *Mathematics in Indigenous Contexts* project were collected by the authors during a number of school visits. Semi-structured interviews with various participants were the principal data collection strategy. During 2005, three interview visits were made to each site. These visits maintained a presence of the researchers in the sites, enabling an ongoing evaluation of the project and its progress with both school staff and community people. Prior to the initial visits to both sites, discussions with the school principals, the relevant NSW Department of Education and Training District Superintendents and Aboriginal community people were held to clarify the project's focus and intended outcomes.

The first visit (Term 2, 2005) focused on discussions with Aboriginal educators and teachers to establish protocols for later discussions with Aboriginal students and Aboriginal community people. The second visit (Term 3, 2005) focused on discussions with Aboriginal students and Aboriginal community people and follow-up discussions with Aboriginal educators and teachers. The third visit (Term 4, 2005) enabled the follow up and completion of discussions with all participants. A fourth visit (Term 1, 2006) was an opportunity for school teachers, Aboriginal educators and community people to comment on the initial categorization of data to ensure that it was a valid representation of participants' views.

The BCC project focused on investigating attitudes of teachers (*primary and secondary, including School executive*) in respect to parent/community (*Aboriginal*) involvement, issues impacting upon community (*Aboriginal*) involvement, and the possible ramifications on student engagement (*Aboriginal and non-Aboriginal*) in school (*primary and secondary*). The three key research questions were:

1. What are the critical interactions between Aboriginal communities, increased community capacity and positive Aboriginal student engagement with education?
2. What are the critical issues that impact on developing sustainable community capacity projects between schools and Aboriginal people?
3. What activities and processes underpin the development of effective school community capacity projects?

People who have a strategic role in the community capacity building are Aboriginal community, Aboriginal Educational Assistants, Aboriginal students, teachers and school principal. These participants were involved in discussions seeking their perspectives on community capacity building regarding the *five challenges* detailed above..

All interviews were audio-taped and transcribed. An initial categorization of the qualitative data was established using a grounded theory approach. Coding was conducted by the authors and identified four constructs linked to the research questions. These constructs formed the *Framework for Successful Community Capacity Building*.

- *Context* – data related to the physical, social, economic, cultural and historical factors in each site;
- *Engagement and Learning* - data related to levels of involvement of Aboriginal students and community with the schools;
- *Sustainability* – data related to factors influencing the continuity of initiatives established during the *Mathematics in Indigenous Contexts* project; and
- *Activities and Processes* – data related to the effective interactions that facilitated school/community engagement.

## The sites

The urban site is situated in Western Sydney. The primary school was established in the mid-1970s. In 2005, approximately 140 of the 450 students at the school were Aboriginal. Most of the people in the community are long-term residents, and many of the children at the school are second generation students.

In 2002/2003, Year 4 teachers volunteered to be involved in the *Mathematics in Indigenous Contexts* project. In collaboration with the Aboriginal Education Assistant (AEA) and the Aboriginal community, mathematics units were developed around a mural theme, use of the local Aboriginal reserve and group-based activities that focused on building specific mathematical skills such as measuring, numeracy, basic operations and geometry.

The rural site is a small community in western New South Wales. It is a harmonious community of about 3000 people, approximately one-third of whom are Aboriginal. Almost one in two pupils at the primary school and one in five of the high school's students are Indigenous. Most of the people in the community are long-term residents, there is little overt racism and, according to one of the Aboriginal community members, "the non-Aboriginal and the Koori (Aboriginal) people all mix well together".

A key focus of the MIC project was building Aboriginal students' specific mathematical skills in measuring, mapping, enlarging, estimating, using compasses, and understanding volume and fractions. The students completed in-class mathematics activities, mapped changes in land use near the school with the help of a local community member, and described directions using compasses. Following these activities, the students were part of an excursion to 'The Pines', an area where the Aboriginal community lived from the 1950s to the mid-1970s. There, they were given a traditional welcome by Aboriginal elders and told personal accounts of the lives of family and tribe before carrying out a series of mathematics activities (Handmer, 2005).

## Results, Analysis and Discussion

The *Mathematics in Indigenous Contexts* project gave priority to the voices of Aboriginal people as an essential means of enhancing the cultural appropriateness of mathematical teaching and learning for Aboriginal students. Building community capacity challenges schools and communities to utilise learning approaches that are based upon meaningful mutual engagement. This project showed that schools can move beyond approaches which assume that schools alone have responsibility for ensuring learning is related or applied to students' contemporary worlds and cultural contexts (NSW Aboriginal Education Consultative Group Inc./NSW Department of Education and Training, 2004). It was based upon the rights of Aboriginal people to

be engaged as decision makers in local policies regarding the nature and form of mathematics education.

The Aboriginal community members interviewed expressed the view that the *Mathematics in Indigenous Contexts* project enriched the engagement of Aboriginal and non-Aboriginal students in their mathematics learning, acknowledged the relevance of community-based mathematics teaching strategies, and increased the capacity of the community to engage in effective mathematics curriculum reform.

The *Framework for Successful Community Capacity Building*, comprising the constructs of Context, Engagement and Learning, Sustainability and Activities and Processes provides a basis upon which to consider the *Five Challenges* for community capacity building.

## Context

A number of key features emerged from both sites related to fostering an environment for community capacity building. These features are discussed with regard to the physical attributes of the sites, the long-term presence of key people from school and community and the reciprocal willingness and commitment of community and educators to engage.

*There's an exchange of knowledge there when you're getting Aboriginal people that come into schools. OK, they're not very well educated but they know a lot about how Aboriginal people live. And the teachers can see how they relate to the kids and the kids relate to them and you're learning off each other all the time.*

(Aboriginal community member, rural site)

All three school sites involved in the project were physically welcoming to the Aboriginal community, through significant displays of Indigenous art and photographs both inside and outside the school buildings, friendly and welcoming front office staff and a general feeling of overall calm. There was an obvious sense of pride in the presentation of the schools through their gardens, playgrounds and buildings with a noticeable absence of graffiti, building damage and litter. It was obvious that the schools took pride in their presentation and that this was respected by their communities, staff and students. There was a sense of self-respect amongst the students and staff of each school. As well, the schools were seen as important centres within the communities.

Of particular note was the pride taken by all involved in the outdoor learning area at the high school. The learning space reflected the calm atmosphere of the school. In the words of one of the Year 10 Aboriginal students who spoke with the researchers for over an hour in this space, it gave him "a feeling of serenity".

Staff, students and community at all of the schools commented that there was really no overt racism. When isolated instances of conflict occurred, those involved were clearly told by school or community that it was just not acceptable in these locations. People from all groups took the responsibility for ensuring harmony.

*There are no colours here, even though it is a massive multi-cultural school. We're not running around constantly saying "Oh no, no, no, I'm black, you're white".*

*There's none of that. The kids don't talk colours and we don't talk colours.*

(Aboriginal community member, urban site)

In all the sites, there are key members of the communities and the school leadership teams who have shown long-term commitment to their roles in developing the strengths of the schools and their engagement with their communities. Of particular note are the roles played by some school executive members and the Aboriginal Education Assistants. These roles are seen as a core part of the business for each of these people and as something in which they would naturally expect to be

involved. The data identify people at both sites who provide role models for other sites in terms of their skills and knowledges and the ways in which they act and interact to build community capacity. Of particular importance in the sites studied were the following people.

*Urban site* Aboriginal Education Assistant; Principal; Assistant Principal.  
*Rural site.* Aboriginal Education Assistants (primary and secondary schools); Principal (secondary school); Head Teacher, Mathematics; Assistant Principal (primary school).

The participants in both sites expressed their beliefs that they wanted to go beyond an involvement of the community with the schools through traditional parent/teacher meetings, school barbecues and sports days. They wanted to move towards a purposeful engagement of community in providing appropriate learning opportunities for Aboriginal students. This willingness was evident in a long-term commitment to build relationships between schools and communities and mutual trust and respect among all involved. Examples of this include in-class tutoring at the urban site, collaboration in curriculum development in both sites, the development of a website dedicated to community engagement at the rural site and support from the local Aboriginal Lands Councils in giving permission for Aboriginal sites to be used as learning spaces.

## Engagement and Learning

By coming together and engaging in community capacity building, all participants are engaged in learning. For example, many of the teachers interviewed noted how much they had learned about the communities, Aboriginal people and themselves through MIC. The teachers were mentored by the Aboriginal educators and community people in developing a different appreciation of the learning ways of their Aboriginal students.

*There is a lot of ignorance of Aboriginal culture. We have to educate them to what we are made of, what we are and where we have come from. We have to open their eyes to see that their way, while it's a good way, it's not the only way to do things.*  
(Aboriginal community member, rural site)

When Aboriginal people and the community are engaged in the school curriculum, with their knowledge and presence valued, they come to feel a greater part of the school. In MIC, such engagement has developed a greater awareness amongst all participants of Aboriginal culture and the importance of education and learning. This awareness amongst all leads to other opportunities for change within communities. Such engagement can reduce the frustration amongst teachers who are trying to fit students into a particular curriculum pattern. As well, it provides opportunities to celebrate community leadership and social justice in building a fairer community for all. Engagement in this project has influenced the competencies, attitudes, values and actions of all participants.

*Change is coming. It has been gradual but I think now there's a bigger focus on it whereas before it was ignored. I think getting people into the school to raise the teacher's awareness is helpful. It makes the students feel more a part of the school. It's that awareness that's changed in non-Aboriginal people and leads to other changes. I reckon it's making the kids more aware of their education and the need for education.* (Aboriginal community member, rural site)

## Sustainability

The effects of many educational initiatives are short-term and unsustainable. One of the features of the approach taken in MIC was to endeavour to have the changes last

well beyond the intervention period. There was a commitment to an engaged presence of the Aboriginal community within the school and a clear purpose in the tasks undertaken. From the beginning of the project, there was a shared understanding amongst all of the collaborative nature of the tasks which led to an ongoing involvement of participants over time. Commitment, explaining and timing were also seen to be critical elements in facilitating change.

*The people involved in it from the beginning got to be committed and they've got to go out and first be here with their Elders and with the community and not give up on them. So you go back there now and you find another way of doing it, it may work. But you've got to keep at it ...it's just explaining yourself more. If they don't understand what they're getting into, well, they're not going to have a go. You've got to catch them at the right time. Things are going on in their lives where it's impossible for them to do things. So if you get them at that right time, you're right. Sometimes you just can't so you just have to keep going back. And you don't try to push it on them, you explain it to them and if they don't understand it, if you haven't explained it properly then you will go back and you'll think about it and go back again...you got to have compassion. (Aboriginal community member, rural site)*

The indications from these participants are that they now feel in a position to continue similar initiatives generated from within their own schools and communities.

The coming together of the knowledges of all participants has led to an enhanced understanding of each others' roles within community and a deeper appreciation of the complementarity of these roles. Key features of the sites that have made this possible are:

- an environment of openness and trust;
- mutual respect;
- sincerity in establishing and maintaining relationships;
- a shared commitment to the tasks involved;
- effective leadership from both the school and community,
- going beyond the call of duty;
- knowledgeable and confident Aboriginal Education Assistants;
- confidence, resilience, efficacy and initiative of Aboriginal community people;
- expressed recognition and celebration of the value of Indigenous knowledge;
- the presence of key Aboriginal and non-Aboriginal community members with a history of harmonious engagement;
- an appreciation of the risks that need to be taken to engage purposefully and a willingness to take these risks;
- active listening;
- a sharing with other schools and community of what had been achieved;
- managing the subtle prejudicial behaviours that might emerge; and
- tangible products and outcomes from the work undertaken.

When these features are achieved in a project, then there would seem to be an excellent chance for sustainability in building community capacity.

*If our kids are going to thrive, we need our community members, and the only way to get them is to let them know what is going on and let the school know what and who is available out there. I'm like a contact person, liaison person and also make sure that the Aboriginal people that are in the school are comfortable. We want them to come back and do what they are good at doing. (Aboriginal Education Assistant, urban site)*

Effective school/community engagement enables participants to develop a deeper understanding of these features and provides opportunities for them to enhance their

personal skills in working with others. In both sites, these features were evident and will, along with the strong leadership discussed under the Context section, result in a sustainable development of community capacity.

## Activities and Processes

What mathematics is done in a project such as MIC is less important than how it is done, providing it does offer opportunities for all participants to engage in meaningful, relevant and interesting tasks. As part of these opportunities, participants need to have clear responsibilities related to the tasks. It is these responsibilities that strengthen the engagement and collaboration in the activities undertaken and facilitate the longevity of a 'workable community'.

This is not to say that the mathematical activities undertaken in the project have no value. There is much evidence that the mathematical excursions to The Pines in rural site and to the Reserve in the urban site were very worthwhile activities in their own rights. They enhanced student mathematical outcomes in special and particularly relevant ways. As well, they helped the adult participants understand each others' cultural history in ways that would be impossible using traditional classroom-based teaching approaches.

*What we did with these projects was brought it back to relevance, not only for just the Aboriginal kids but for the non-Aboriginal kids too. It would be better for the community if they've got awareness of the history of it, the town they're living in and the people in it. So that must feel better.* (Aboriginal community member, rural site)

From the perspective of community capacity building, the actual mathematics learned was a pathway along which people travelled to reach a greater understanding of each other and their communities.

Another example of an important collaboration leading to enhanced community capacity is the in-class tutoring at the urban site where Aboriginal people worked hand in hand with teachers in supporting Aboriginal students' learning in literacy and numeracy. While this undoubtedly had major positive effects on students' learning, it has also had important ramifications for the way in which many Aboriginal people in the community see themselves as empowered adults.

One of the notable characteristics in both sites was the realisation that the activities undertaken could be seen as celebrations of learning and of community capacity. Another such celebratory approach was the willingness of participants in both sites to share their success with other communities and professional groups. One of the most likely activities to sustain the enhancement of community capacity is such celebration as it builds both the prestige and the memory of the community.

## Challenges of Community Capacity Building

The five challenges for community capacity building that were identified have all been experienced in the *Mathematics in Indigenous Contexts* project.

The challenges involved in the ongoing processes of community capacity building are both inter-related and complex. While we have identified the *five challenges* as separate entities, meaningful community capacity building will occur only when all participants appreciate these as an integrated whole. In both MIC sites, the challenges have been addressed by all participants with the result that community capacity has been enhanced. It is tempting to declare that all challenges have been overcome but it would be naïve to do so. MIC has been yet another step on the path to developing mutual respect and mutual engagement for purposeful learning, generating alternative

creative discourses, informing understanding, strengthening home-school-community alignment and raising both personal and collective efficacy. There is still much more to do in both of the project sites but excellent starts have been made. The continuation of these trajectories depends upon ongoing commitment and engagement of Aboriginal community members, students and teachers in purposeful tasks. One of these tasks needs to be clear succession planning to ensure that as important members of the community or school leave the sites, there are planned strategies implemented to enable a smooth transition. The continuing development in striving to meet each of the stated challenges puts both sites in excellent positions to strengthen further their community capacity.

## **Conclusion**

Through these two case studies and the reporting of the project's impact upon the communities, key features have been identified that other communities could use in enhancing their own community capacity building efforts. The frameworks provide a structure whereby communities can evaluate to what degree they are achieving the key components of a successful capacity building program. Each framework considers the community activities from a slightly different perspective but all have relevance to the development of communities. In the past, too much has been left to chance as well meaning groups of people strived to improve the lot of Aboriginal people without the Aboriginal people having a direct engagement in the process. The *Mathematics in Indigenous Contexts* project has provided models for a shift in approach which does ensure that Aboriginal communities play a leading role in the development of their capacity.

Strong relationships established between schools and Aboriginal communities can improve educational outcomes for Australian Aboriginal students. The development of such partnerships requires time, commitment, genuine consultation, mutual respect and active listening through shared discussion between those in the school and the community. There is still much to be done in bringing a greater focus on enhancing the learning outcomes of Aboriginal students, particularly in mathematics. This project is but one example of what can be achieved through effective engagement and community capacity building.

## **References**

- Alton-Lee, A. (2003) *Quality teaching for diverse students in schooling: Best evidence synthesis*. Wellington, NZ. Ministry of Education
- Barton, D. (1994) *An introduction to the ecology of written language*. Oxford. Blackwell
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: theory, research, critique*. London: Taylor & Francis.
- Conroy, J. (2004). *Betwixt and between: The liminal imagination, education and democracy*. New York. Peter Lang.
- Handmer, A. (2005). Teach your children well. *Teacher*, December, 22-24.
- Labone, E. (2004). Teacher efficacy: maturing the construct through research in alternative paradigms. *Teaching and Teacher Education*, 20(4), 341-359.
- Matthews, S., Howard, P., & Perry, B. (2003). Working together to enhance Australian Aboriginal students' mathematics learning. In L. Bragg, C. Campbell, G. Herbert, & J. Mousley (Eds.), *Proceedings of the 26<sup>th</sup> Annual Conference of the Mathematics Education Research Group of Australasia* (pp.17-28). MERGA: Geelong
- McGinty, S. (2002). Community capacity building. Paper presented at *Annual Conference of the Australian Association for Research in Education*, Brisbane. Available online from: <http://www.aare.edu.au/02pap/mcg02476.htm>

- NSW Aboriginal Education Consultative Group Inc./NSW Department of Education and Training. (2004). *The report of the review of Aboriginal education. Yanigurra muya: Ganggurrinmya yaarri guurulaw yirrigin.gurray (Freeing the spirit: Dreaming an equal future)*. Sydney: Author.
- NSW Department of Education and Training (2003). *Quality teaching in NSW public schools*. Sydney: Author.
- Okagaki, L. (2001). Triarchic model of minority children's school achievement. *Educational Psychologist*, 36(1), 9-20.