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**International Journal of Equity and  
Innovation in Early Childhood**

**Article**

**Early childhood project analysed within a model enhancing  
the self-efficacy of Indigenous people**

***Marguerite Maher, University of Notre Dame Australia***

This paper presents a model which weaves together an adaptation of Bronfenbrenner's bio-ecological model (Bronfenbrenner, 1979, 1989, 1993) and the tenets of human agency theory (Bandura, 2001; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Carlson, 1997), which are central to decision-making, self-regulation and self-determination. This model provides a framework to explain how non-Indigenous lecturers were able to work in culturally appropriate ways with community members in remote Indigenous communities in the Northern Territory, Australia, on a project which focussed on improving the literacy and numeracy skills of four-year-old children. The aim of this initiative was to enhance children's capacity to engage with expectations on entry into formal schooling. There were multiple levels of engagement in the design and implementation of the project. For the positive outcomes to be sustainable it was imperative that the initiative be embraced by the community and that they see themselves, rather than the non-Indigenous stakeholders, as the key to its success. The project's implementation is described in detail and outcomes are provided. These include the children demonstrating increased pre-reading and numeracy skills and, importantly, the engagement of the whole community in the project and the previously unqualified early childhood educators being motivated to complete a Certificate III in Children's Services.

## **Introduction**

The bio-ecological model is commonly used in a Western context to explain and understand aspects of children's development. This paper extends this model by weaving it together with the tenets of human agency theory. It then explores the model's usefulness in explaining the success of a project in six remote Indigenous communities in the Northern Territory (NT) of Australia. Contact with Indigenous people in these remote communities and established links from another project, meant that the communities had ownership of the current project from the outset, taking care of the decisions regarding who would work with the children and what sorts of activities would take place. The project aimed to use culturally appropriate approaches to improve four-year-old children's literacy and numeracy skills on entry into formal schooling by making Indigenous ways of knowing, being and doing a key pillar of their learning. The formal Western classroom with an expectation of high levels of conformity and a strong emphasis on written communication is at variance with the project children's learning experiences prior to school. The implementation of the project at one site is analysed in terms of the model. It was successful on many levels but to report those findings would leave it as one of many such reports. Rather, in this paper, the author wishes to analyse the thinking, the implementation and the outcomes in terms of a model which has the potential to be an empowering framework for Indigenous people as they live at the cultural interface (Nakata, 2008) where there is, at times, a disjuncture between people's cultural aspirations and those of a dominant culture.

## **Bio-ecological model introduced**

Elements within the various systems in the bio-ecological model (see figure 1) potentially influence the self-efficacy and educational outcomes of children. Within the bio-ecological model, transactions occur when there is interplay between the child at the centre and the settings within which the child operates. It is not simply a one- or two-way interaction that occurs. As one element or system influences another in any interaction, so the influenced one changes, indeed, but at the same time the one which initiated the interplay is also affected and transformed and nothing remains the same. In the current study, the elements pertinent to the children at the centre of the project, might be influenced by any or all of the elements noted in figure 1.

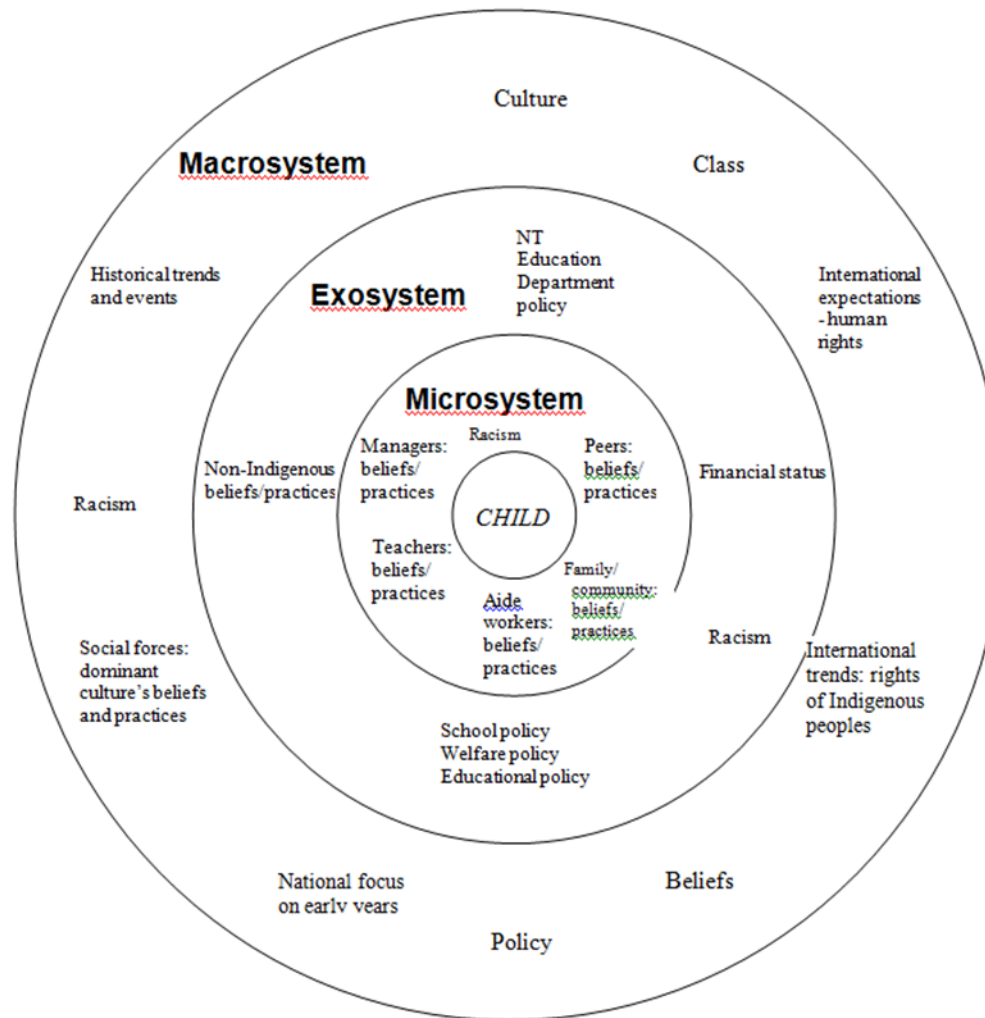


Figure 1. Bronfenbrenner's Model (adapted) includes but is not limited to noted elements in a child's remote Indigenous environment (Bronfenbrenner as cited in Berk, 2010).

Although the emphasis on developmental environment is familiar to educators, Bronfenbrenner's (1979) call for examination of the "multiperson systems not limited to a single setting" and "aspects of the environment beyond the immediate setting" challenges those concerned with the education of children in Aboriginal contexts to look beyond the tensions of high socio-economic status (SES) versus low SES, national curriculum standards versus community priorities, or parent and community aspirations versus bureaucratic goals.

Explaining the transaction dynamic, and developing his original proposition, Bronfenbrenner (1989) wrote:

the ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life course, between an active, growing human being, and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded (p. 188).

Using Bronfenbrenner's (1989) model and applying it to children in remote Indigenous communities, it is possible to represent the transactions likely to operate within such a child's ecosystem in figure 1. There are several notable points that emerge from this model which profoundly influence the way the effectiveness of an initiative, such as the one described in this paper, can be evaluated. First, the impact of interaction between the child and others is seen transactionally, not additively. Second, it is clearly explained that the settings within

which the child develops are ever changing, affected by relations and transactions between the settings. Third, the unique nature and circumstances of each child's situation are reflected, honouring the notion that needs, abilities, and barriers to learning are likely to differ from child to child.

### **Human agency**

It is useful here to link the transactional effects of Bronfenbrenner (1979, 1989, 1993), as illustrated in figure 1, to the concept of human agency as described by Bandura (2001) who sees being an agent as exercising control over circumstances to bring about desired outcomes. He holds that the "core features of agency enable people to play a part in their self-development, adaptation, and self-renewal with changing times" (Bandura, 2001, p. 1). He, like Bronfenbrenner (1979, 1989, 1993), rejects the view that human behaviour is controlled or automatically shaped by stimuli provided by the environment, and where people are depicted as "devoid of conscious agentic capabilities" (Bandura, 2001, p. 1).

Supporting the view of human agency, McDaniel and DiBella-McCarthy (2012) emphasises the pivotal role that consciousness decision-making plays in being an agent of action. Underlying this is the necessary motivation to act. "Unless people believe that they can produce desired outcomes by their actions, they have little incentive to act or persevere in the face of difficulties" (Bandura, Barbaranelli, Caprara & Pastorelli, 2001, p. 187). Indeed efficacy beliefs play an important part in people's ability to adapt to change and to human development in its entirety (Ratts, 2011). According to Bandura (2001) there are

several mechanisms of personal agency: intentionality, forethought, self-reactiveness and self-reflectiveness, but “none is more central or pervasive than people’s beliefs in their capabilities to exercise control over their level of functioning and environmental demands” (Bandura et al., 1996, p. 1206).

### **Bio-ecological model and human agency theory interwoven**

Bronfenbrenner’s (1993) bio-ecological model portrays “microsystems”, “mesosystems”, “exosystems”, and “macrosystems” linked together in “a system of nested, interdependent, dynamic structures ranging from the proximal, consisting of immediate face-to-face settings, to the most distal, comprising broader social contexts such as classes and culture” (p. 4). For a child in a remote Indigenous community in the NT, the four systems describe the interwoven networks of transactions that create an individual’s ecology (see figure 1).

Contextual elements of microsystem and mesosystem as described by Bronfenbrenner (1993) are of particular relevance in investigating what determines the educational outcomes of Indigenous children in remote communities. He described the microsystem as:

patterns of activities, roles, and interpersonal relations experienced by the developing persons in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with, and activity in, the immediate

environment (Bronfenbrenner, 1993, p. 15).

The emphasis here of the importance of the child’s actions, reactions, and interactions with others in the microsystem, as determined by their beliefs and practices, is useful in understanding the child’s development. The child’s engagement with any one of these people in the attendant setting (for example: centre, playground, home) would be considered a transaction within the microsystem.

The mesosystem is the web of involvement that:

comprises linkages and processes taking place between two or more settings containing the developing person. Special attention is focused on the synergistic effects created by the interaction of developmentally instigative or inhibitory features and processes present in each setting (Bronfenbrenner, 1993, p. 22).

In the case of Indigenous children their self-efficacy and educational outcomes are in the first instance influenced by the family in the home setting and those in the community as the beliefs and practices of these primary people in the child’s life have a direct bearing on the child’s development (Berk, 2010). Once the child goes to school, the linkages between home and school for the child, and the new transactions with teachers, peers, Teacher Aides and managers will have developmentally instigative or inhibitory effects on the child. The effects within and across systems may, depending on the beliefs and practices of the people in those systems, act against one another, or they may reinforce one another, highlighting discrepancies and

possibly causing the child to confront contradictory messages between microsystems. As highlighted by Bandura et al. (1999), however, “individuals play a proactive role in their adaptation rather than simply undergo experiences through environmental stressors acting on their personal vulnerabilities” (p. 258). People in this model are seen as “producers as well as products of social systems” (Bandura, 2001, p. 1). Irrespective of potentially conflicting messages or tensions that may exist, positive outcomes are seen to be attainable for all children where there is no incompatible disjuncture between the elements within the microsystem.

As there is an interplay between the systems within the model in figure 1, it is possible to identify links to the three models of agency identified by Bandura (2002), those of “personal agency exercised individually; proxy agency in which people secure desired outcomes by influencing others to act on their behalf; and collective agency in which people act in concert to shape their future” (p. 269). The proxy agency as described here would suggest that children actively motivate others to work on their behalf. In this model, it would probably be the community Elders who would do this. In another article, Bandura (2001) describes proxy agency as agency “that relies on others to act on one’s behalf to secure desired outcomes” (p. 1). In the case of young children, this would be the likelier definition. In summary then, children have efficacy in their transactions with parents and family, community and Elders, with peers, and with teachers, which exemplifies direct personal agency. Parents, teachers, paraprofessionals, early childhood educators and managers can, and do, individually advocate on

behalf of the children in a proxy agency role. In a society where there is collective responsibility for all, it is likely that an initiative will succeed when there is coherent action amongst these key players, typified as collective agency by Bandura (2002).

Exosystems (Bronfenbrenner, 1979, 1989, 1993) exist when there is a setting not containing the child, but which nevertheless exerts an influence on his or her development. As depicted in the model, the assumptions, beliefs and practices of the people who interact with the child in the micro- or mesosystem are influenced by factors noted in the exosystem. The non-Indigenous community frequently acts as gatekeepers, for example, and their beliefs and practices are influenced by the dominant culture.

The Australian government’s educational policy is central to schools’ policies in remote communities and has a direct or indirect bearing on the child’s development and willingness to engage and to learn. The government’s decree that English be used as the language of instruction for the first four hours of schooling will impact depending on the extent to which the school leaders adhere to this dictum. The government commitment to ensuring 15 hours of free early childhood education with a university trained teacher for four-year-olds is laudable as achieving equity in early childhood education “rests on two inter-linked dimensions, access and quality” (Britto, Yoshikawa & Boller, 2011, p. 8). However it is impracticable in many remote communities in the NT where the centre supervisor often has no formal early childhood education. These exosystem factors also can have

inhibitory or enabling outcomes for children at the centre of the model.

Parents' financial status has an influence as well, as the wealthier they are, the more options are open to them when making decisions about their child's education. It is interesting to note that in a study on what shapes children's aspirations and career trajectories, Bandura et al. (2001) found that "familial socioeconomic status influences parental perceived efficacy and academic aspirations, which, in turn, affect their children's perceived efficacy, academic aspirations and scholastic achievement" (p. 188), and they conclude, therefore, that "socioeconomic status had ... an indirect effect on children's perceived ... efficacy" (p. 198). They found, however, that children's judgements about their occupational efficacy are "entirely mediated through the effect on children's self-conceptions and efficacy" (p. 198). These findings support the transactional nature and interpretation of the interplay between the child at the centre of the bio-ecological model and the people in that child's microsystem whose efficacy is inhibited or advanced by exosystem level factors.

The macrosystem:

consists of the overarching pattern of micro- meso- and exosystems characteristic of a given culture, subculture, or other extended social structure, with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options and patterns of social interchange that are embedded in such overarching systems (Bronfenbrenner, 1993, p. 25).

Within the exo-, and macrosystems, agency can be interpreted within Bandura's (2001) model as collective agency "exercised through socially coordinative and interdependent effort" (p. 1). At times the call from Indigenous people in Australia for recognition can be fragmented. There are increasingly, however, links to Indigenous people world-wide. With this increased critical mass, there is likely to be stronger "perceived collective efficacy" and consequently higher "aspirations and motivational investment in their undertakings" and furthermore higher "morale and resilience to stressors" producing greater "performance accomplishments" (Bandura, 2001, p. 14). This collective agency is more likely to overcome potential active opposition, part of the rule structures of any social system, "when it is deliberately focused on shared goals" (Bessant, 2012, p.632) and where a unity of will is created by that universal bond. It is necessary to consider the possibility that while Indigenous peoples in Australia are advantaged because of numbers with international trends, thus strengthening their collective agency, the specific needs and aspirations in individual communities can become overshadowed or lost within the wider endeavours at an international level.

At the same time as transactions occur between different elements depicted in figure 1, it is important to note that some traverse all systems. If one considers the concept of beliefs, there are beliefs that operate in and across various systems: macro-, exo-, meso-, and microsystems. While they traverse all systems, the form they take and the way they are experienced, is likely to vary according to system kind. Trends in beliefs in society



– the discourse espoused – described at a macrosystem level, will either have an enabling or inhibitory effect on Indigenous people. In the same way, though, beliefs of people who interact with Indigenous people at a meso- and microsystem level, work transactionally, influencing what discourse is accepted and adopted at a macrosystem level in society. These macrosystem level beliefs again support or challenge beliefs internalised by the people who interact with Indigenous children at a micro- and mesosystem level.

Even within systems there are transactions. Beliefs of policy makers, for example, will determine what education and welfare policies are promulgated at government level. These policies then traverse to other levels of the model shown in figure 1, affecting school policy regarding language of instruction, for example. As non-Indigenous teachers have more contact with students and their families, and as they are accepted into the community, because of policy dictating their interaction with these students, so their belief systems may transform, affecting their practice, thus continuing the transaction.

Bandura (2002) notes “cross-cultural commonality of agentic capacity” (p.273) irrespective of whether people live in a mainly individualistic society such as some Western cultures, or one that is more collectively oriented such as some Indigenous cultures. He explains that a well developed “sense of personal efficacy is just as important to group-directedness as to self-directedness” (Bandura, 2002, p. 273). As he points out, group pursuits “are no less demanding than individual pursuits” (Bandura, 2002, p. 273). He emphasises

the importance of personal efficacy if success is to be achieved, whether the goal is individually or collectively determined. Bandura (2002) therefore concludes that “there are collectivists in individualistic cultures and individualists in collectivistic cultures” (p. 274) since cultures are diverse and ever changing, not invariant. All people live with others in a group, whether familial or social, even in individualistic societies; and in collectivist cultures people are not so completely immersed in the group that they lose their individuality.

It would therefore be a false dichotomy to consider self-efficacy as individualism and to contrast it with collectivism. Bandura (2002) highlights that this will not affect the personal agency of any particular sector of society since “human agency operates generatively and proactively on social systems not just reactively” (p. 278). Thus, if individuals experience successful implementation of an educational initiative, for example, whether child, parent, or teacher, this is likely to generate a positive attitude to future instances of suggested initiatives for them and for others.

### **The current study**

In the current study, through the “Closing the Gap” strategy in the NT under the then Northern Territory Emergency Response Act 2007 (Australian Government, 2007), funding was secured to link one university academic to each of six preschools, attached to primary schools, in six remote Indigenous communities in the NT of Australia. The six communities were very remote – the closest one being a three-hour drive from Darwin. Most were only accessible from Darwin by plane.

The rationale for the program was to combat the fact that in Australia today, “Indigenous students at all levels experience worse educational outcomes than non-Indigenous students” (Steering Committee for the Review of Government Service Provisions, 2007, p. 4) and to reach the marginalised (UNESCO, 2010). There are undisputed benefits to quality education in the early years (Berk, 2010; Cooper, 2011; Howes et al., 2008; Moss & Dahlberg, 2008; Woodhead & Oates, 2009), however in the NT there is a shortage of Indigenous teachers and because of the remoteness of the NT communities and the inhospitable weather conditions, it is difficult to recruit and retain qualified non-Indigenous staff (Maher, 2010).

The study was firmly positioned in the perspective of wanting to improve the children’s literacy and numeracy skills on entry into formal schooling rather than approaching it from a school readiness (Clark & Zygmunt-Fillwalk, 2008; Lara-Cinisomo, Fuligni, Daughterty, Howes & Karoly, 2009; Noel, 2010) stance. Transition to formal schooling is a currently much debated topic (Dockett & Perry, 2007; Fisher, 2011; Mortlock, Plowman, & Glasgow, 2011), with some being more successful than others at meeting the new challenges (Wildenger & McIntyre, 2012). The notion of ‘ready schools’ (LoCasale-Crouch, Mashburn, Downer & Pianta, 2008; Noel, 2011) is currently a way of thinking about children’s transition and the current study wished to play a role from this perspective.

The academics involved in the project worked for two years with preschool teachers, four-year-old children and their families to enhance the children’s literacy

and numeracy skills on entry into formal schooling at age five. All the lecturers were non-Indigenous but had experience in working previously with Indigenous people; from its conception, the project made Indigenous ways of knowing, being and doing key pillars of children’s learning. Additionally, the aim was to empower the early childhood educator, regardless of whether or not that person had formal qualifications or whether they were Indigenous or non-Indigenous, to want to implement the program, to be able to implement the program, to be able to articulate why these strategies are important to children’s learning and to continue with the initiative at the end of two years. At all costs, the traps that some government funded initiatives had fallen into would be avoided – such as insisting on practice without ownership by the people, or preaching from a Western perspective that this way is best. The lecturers needed to build on the positive aspects of Indigenous culture and negotiate understanding of the premise of any innovation with the local Indigenous community.

A six-month period of preparation was undertaken by the university coordinator of this project, a non-Indigenous woman, making links with the community Elders in the first place to discuss the project and seek their input into any value they might discern; the power of decision-making was left with them. When they were supportive of the project, the university coordinator then met with Indigenous and non-Indigenous leaders within the schools, where the preschools were attached, to gain their perspectives, their perceived advantages and challenges and to tailor the implementation to their specific requirements. Their responses reinforced for the researcher how critical it

would be to ensure enhancement of human agency (Bandura , 2001) for people whose agency has at times been compromised by colonisation and colonialism. Although colonisation often took place within the context of resistance and the struggle for justice by Indigenous people, post-colonial theory calls for ongoing justice by highlighting “social and psychological suffering done to powerless victims of colonization” (Parsons & Harding, 2011, section 1). These people have, at times, had their culture, right to self-determination, language and traditions replaced with the hegemony of the West (Kelbassa, 2008; Smith, 2007).

Reflecting their need for assurance that this project was not yet another colonising exercise, Elders at one community wanted to know if it would mean the teacher would have to leave the community, if she wanted to up-skill in which case they would not wish to participate. At another, they wanted to be sure there would be no financial disadvantage to families if children did not wish to attend the preschool with this initiative. At a third site, where a number of different family groups, or “skin groups” as they called them, were represented, Elders wanted to know if mothers of children would still be welcome at the preschool where the teacher was not of their skin group or language. At that time the mothers, who were multilingual, translated for the children, and they wanted the assurance that the current mentoring and support would not be affected. At several sites the Elders wanted to know if their language or English would be used and, when given the choice, almost all wanted both to be used with the children, although one site wanted more English to be used. While supportive of an initiative which held the

potential to improve outcomes for their children, Elders were clear that they did not want the current positives of the preschool within their community compromised in any way. The way the introduction and the whole project unfolded ensured that they were the leaders, the decision-makers and the drivers of change of topic or focus as the project progressed over two years.

The final part of the preparation took place when the coordinator of the project met with the teachers in the preschools who would be pivotal in the success or otherwise of the program and who had already been mandated by their communities to be a part of the project. At all times, the community members were in partnership with the university academic and the researcher in the completion of this project.

Already the links to the model as depicted in figure 1 become apparent. At the macrosystem level, beliefs of non-Indigenous Australians had motivated political leaders to promulgate policy and to fund initiatives to reduce the disparity in achievement between Indigenous and non-Indigenous children. This traversed to the exosystem level where the university was able to access the funding and conceptualise a program that might achieve those aims. At the mesosystem level the coordinator of the project, whose beliefs were influenced by her previous interactions with Indigenous people, brought into existence a project that would have Indigenous ways of knowing, being and doing as a key pillar. It was clear that the children would be developing at the cultural interface, “the contested space between two knowledge systems” as described by Nakata (2007, p. 9). The aim of this project was to

improve the literacy and numeracy skills of four-year-olds in such a way that the confluence of knowledges would help to bridge the divide, at microsystem level, between the children's and their families cultural aspirations and those of a largely Western curriculum they would encounter on entry into formal schooling. Those aspirations encompass a broad array of elements, paramount of which is "the Indigenous epistemological basis of knowledge construction ... are embedded ... in ways of story-telling, of memory-making, in narrative, art and performance; in cultural and social practices, of relating to kin, of socialising children; in ways of thinking, of transmitting knowledge" (Nakata, 2007, p. 10).

*One site described as an example*

To protect the privacy of the remote Indigenous community, the term Community X is used to identify the people of this community. At the start of the project in Community X, a situational analysis showed that there was little focus on written texts in the preschool. The oral tradition within the community is extremely strong, visual representation through traditional art work is highly prized and there was evidence of these in the preschool, but few books were available.

The lecturer, working with the preschool teacher who had no formal qualifications in early childhood education but who was a highly respected member of Community X, discussed how they might bring the children's lived experience into the classroom. Each child was given a disposable camera to take photos of things that interested them. The pictures were uploaded into the computer and each child dictated the text for their book. Each child's book was produced not just

for that child but one for each child, and a 'big book' was made of each child's story. A book case was provided to each home and the children could take their book and their friends' books home and keep them there. They loved their books and were fascinated with their friends' books too, "reading" them to family members and getting family members to read to them. One child focussed on body parts and had as his text on each page "This is Tyron's foot" or "This is Lucy's ear". Many had taken photos of their tree, their river, their mountain. Some had taken photos of a fishing expedition, family members doing art work. The decision was made by Community X Elders that the text should be in English so that children would have more exposure to English prior to formal schooling. At times, however, children's mother tongue words were used in conjunction with English if that was what the children preferred.

Next there was whole community expedition to country – their traditional lands. The Elders told dreamtime stories and they sang and danced. Photos were taken throughout and books were made of that expedition. The children were enchanted both with the stories told by the Elders, but also by the books that ensued.

Soon, commercially produced picture books, some of which were reflective of the local Indigenous culture, could be introduced to the preschool; by now children were completely enamoured of reading and in a preschool, which adopted a free play philosophy, the children would choose to spend protracted periods reading, often in groups, talking and discussing, with deep concentration focusing on the fine detail of the pictures.

At the same time the teacher in the preschool became keen to up-skill and it was made possible for her to complete a Certificate III in Children's Services during the project. There is no doubt that this early childhood educator was empowered and motivated to engage the children in literacy and numeracy activities and their transition to formal schooling has been shown to be uncomplicated in that the children had all the pre-reading skills and attitudes necessary to engage with teaching in the formal classroom (Record of Steering Committee, 2011).

Key to the success of this program was that the lecturer increasingly withdrew from being the initiator of ideas and became more coach, then mentor, then friend and equal, a learner together with the teacher. This method had several positive outcomes as it impacted positively on the positioning of the Indigenous teacher's self-efficacy and agency as she saw herself being successful in the Western academy as well as augmenting her success and worth within her own context. Being in the role of teacher and enhancing the lecturer's cultural capacity was a powerful outcome for both.

### **The model in action and into the future – a novel way of thinking?**

As discussed, driven by beliefs at a macrosystem level, the Australian government's strategy in the NT provided funding for projects aimed at enhancing the numeracy and literacy levels of Indigenous children on entry to formal schooling. At an exosystem level, University faculty members could access the funding and develop initiatives aspiring to achieve these aims in partnership with Elders in the remote communities. At a mesosystem level,

lecturers interacted with all community members, the parents, the teachers, and the children. At a microsystem level, the children and parents were engaged with the school in a common endeavour.

In the current study, it is also possible to interpret events within the nexus between transactional interactions and human agency theory: a multicausal model "which integrates sociostructural and personal determinants" (Bandura, 2002, p. 278). The notion has been mooted that education in Indigenous communities is part of a larger process still ongoing in Australia – that of achieving equality between Indigenous and non-Indigenous people in areas of well-being, health, life expectancy, educational levels and exclusion in society. Consequently policy-makers largely embraced the world-wide trend away from deficit thinking in relation to Indigenous people, favouring the social and bio-ecological models which see education as the ideal embraced by all as the way to have Indigenous children stand proudly with a foot in both cultures. In terms of the model, these macrosystem elements contribute to the philosophical perspective adopted in the *Belonging, Being, Becoming: The Early Years Learning Framework for Australia* (Department of Education, Employment and Workplace Relations, 2009), a new early childhood curriculum and a first for Australia. This mandatory curriculum in turn contributes to policy formation at an exo- and mesosystem level as schools analyse its potential and organise its implementation.

The move in Australia, at a macro- and exosystem level, is towards a rights based educational system that acknowledges that being, becoming and belonging will look different in a variety of

contexts. While it might never be possible fully to realise social justice when we keep “wrestling with what words to use” (Tharp, 2012) to capture precisely what we mean, interpretations of social justice are usually based on the equitable distribution of social goods, and education is considered a social good (Buchanan, 2011; Ben-Porath, 2012). Additional aspects for interpretation are “recognition (how ... we ensure a level playing field for competition) and ... outcomes (how ... we make certain that successes are fairly distributed in relation to populations)” (Hytten & Bettez, 2011, p.11). Exclusion from the social good of education is unjust from all these perspectives when it is premised on a marginalising condition.

Therefore, at an exosystem level in Australia, education policy aspires to a system where stigmatisation and separation will cease to exist and every learner’s rights to human dignity, to education, and to equality will be realised. The literature on social justice, focuses precisely on issues of ethnicity, race, class, gender and sexual orientation (Applebaum, 2012; Atweh, 2011; Beswick, Sloat & Willms, 2008; Hytten & Bettez, 2011; Ho, 2012; Jennings, 2012; Jocson, 2009; Lee, 2012; Skutnabb-Kangas, 2012) where Australia is making gains but has not been able to empower its Indigenous people to achieve on any measures to the same level as non-Indigenous Australians. In the proposed model, it is possible to see a positive way forward if, at an exosystem level, some adaptations indeed need to be effected. People who understand the proposed model will see themselves as having agency, in this case collective agency of groups within the system, such as Elders in the community, teachers, school managers and parent groups. As such

they can have an effective voice. Seen within this model stakeholders can comprehend that elements traverse all levels. If they voice criticism, dissatisfaction, suggestions, these will be heard by politicians at an exosystem or macrosystem level and changes to policy can be made which, in turn, can alter practice to the benefit of those “actors” in the centre of the model. This contribution as part of collective agency is potentially empowering for people to consider as described in the current study.

The author notes the necessity of providing, within the educational system, quality education with an emphasis on all marginalised groups, however the current study brought to light the challenges of remote communities which are informed by the disempowerment of Indigenous people:

- inadequate support services,
- lack of appropriate facilities and materials,
- ineffective policies and legislation,
- inadequate teacher education programs, and
- lack of relevant research information.

Within the proposed model, even a relatively small-scale study can contribute the setting of guidelines for new studies, and as points of reference for National, State and Territory Education departments as they consider how to move forward to lessen such negative impacts. Policy need no longer be seen in a top-down, autocratic paradigm. Within this model, all are actors in various systems of the model. Thus, excellent education for Indigenous people can become a shared vision through collective or proxy agency as policy-makers take

advice from them on the best way forward.

## **Conclusion**

This paper describes the conceptualisation and implementation of a project that had positive learning outcomes for children. This paper provides an analysis of the elements of that project in terms of a model that intertwines Bronfenbrenner's (1979, 1989, 1993) bio-ecological model and the tenets of human agency theory (Bandura, 2001; Bandura et al., 1996; Bandura et al., 1999), thus providing a novel framework for understanding why the project was successful and how it might be useful for others into the future.

As noted by Bandura (2001) “[u]nless people believe that they can produce desired outcomes by their actions, they have little incentive to act or persevere in the face of difficulties” (p. 187). A major strength of this current initiative was not just the children's engagement with literacy and numeracy activities, but the huge strides taken by the early childhood educator working with the children ensuring that the activities and strategies were sustainable, as well as the complete support of the entire community for the project. This paper therefore presents a model that does not deny the evidence that there are challenges with education in remote Indigenous communities: English as the medium of instruction when it is an additional language for the children, under- or unqualified staff, poorer educational outcomes for these children than their non-Aboriginal peers and a disjuncture between the community's aspirations and that of the Western curriculum offered. It does, however, provide a framework within which people can see themselves as

having agency and a positive role to play. This model fosters collaboration and the empowerment of people to have a say and to then understand that they are contributing to a shared vision. It is hoped that this model will provoke all people involved with the education of Indigenous children to become agents for change. The power of this model lies in its acknowledgement of the importance of microsystem transactions and then, as these actors express their beliefs, founded on experience, their voice becomes amplified through their contribution via proxy or collective agency. Their opinions traverse to other systems of the model and necessary change can be effected.

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<sup>i</sup> Any transaction between the child at the centre and any one other is seen as being a microsystem transaction. When two or more interact, it is seen as being a mesosystem transaction e.g. when parents, teacher, and the child are involved.