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Kairaranga

Weaving educational threads. Weaving educational practice.



FRONT COVER

Callum Weir

Year 3

One Tree Point School, Ruakaka

The artwork on the cover is by Callum Weir, a Year 3 student at One Tree Point School in Ruakaka. Callum completed this art work after studying the artist Frederick Hundert Wasser whose last work is located at Kawa Kawa in Northland.

One Tree Point School is located on the southern side of Whangarei Harbour. The school has a large number of children with special education needs, and these children are fully integrated in an inclusive school environment. It is also the base school for Kerrie Lomas: RTLB National Coordinator Māori.



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

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Editorial

**Tungia te ururua
Kia tupu whakaritorito
Te tapa o te harakeke**

**Clear away the undergrowth
So that the new shoots
May emerge**

(Henare, Comer, & Thompson, 1991)

In this, our third joint effort, we have taken collaboration to new heights and apprenticed another three willing victims on the *Kairaranga* journey.

Utilising the cooperative learning structure of three stay, three stray, we are rotating around the editorial board to ensure that every member has an opportunity to participate in all aspects of publication. This is proving to be a useful strategy because the network, collegiality and the spirit of *Kairaranga* is being strengthened by this evolving collaborative effort.

A theme running through this issue is a discussion around talents, how they are recognised, uncovered, celebrated and developed.

In Keith Greaney's article we are asked to consider early intervention for children showing slower reading progress prior to six-year-net testing and Reading Recovery Programmes. Debbie Burrows asks us to consider how we would transition students as we gift them on to our secondary schools, hoping that all our work, knowledge and their progress over the years will continue in another setting. Roger Moltzen and Angus McFarlane encourage us to consider the Māori view of giftedness, where talents are viewed as a resource to be shared, a resource to benefit many rather than just the holder of the talent.

Two articles that will have immediate practical application are those by Garth Richie, who discusses metacognition for students with learning disabilities, and Jayne Moyle's work in the field of articulation, which provides useful research data and practical developmental guidelines with specific reference to the mastery of blends in articulation.

In Jean Annan's article "Ecological Practice in Educational Psychology" we begin an ongoing discussion about how ecological theory develops into ecological practice, which is further developed in this issue in an article by Jo Bowler. We are hoping this model of articles following on from each other becomes a trend in future issues of *Kairaranga*.

By working together with colleagues from RTLB, GSE and tertiary institutions we have found common threads from which the kaupapa of *Kairaranga* evolves. An overlap in our professional discussions has been particularly stimulating and we are hoping that by bringing you these articles you will be able to share in this collaborative process with us.

This journal, which coincides with the RTLB national conference in Northland, features an interview with highly respected Kaumatua, Tokararangi Totoro, and also showcases the artwork of Callum Weir, a Year four student at One Tree Point School in Ruakaka. We hope you will enjoy this focus on Northland and its talented people.

Vanesse, Paul, Cath

Kairaranga

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MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

An interview with: Tokararangi Totoro

Tokararangi Totoro

Tokararangi is the Pouarahi-a-takiwa (District Māori Advisor) for the Whangarei District office.

Sonja Bateman

Practice Advisor (Māori), Group Special Education, Waikato.



Ko Hikurangi te maunga.

Ko Waiapu te awa.

Ko Te Whānau-ā-Tūhakairiora te hapū

Ko Ngāti Porou te iwi.

Ko Tokararangi Katea Tawhiti Totoro au.

Can you just tell us a little bit about where you are from, your family ...

I was born in Te Araroa. I am from a family of 10. I didn't grow up with my siblings. At the age of twelve months I became a whāngai to my aunty and uncle. I have two whāngai sisters. I went to school in Pōtaka, Te Araroa and Cape Whangaparoua.

Was Māori your first language, Toka?

Yes, Māori was my first language and it was the main language of communication in our home.

So when did you start speaking English?

Probably when we interacted with cousins and other tamariki of the same age. You had to speak English when you had to purchase something from the shop. Obviously we had to speak English at school. So while many of our parents spoke Māori fluently, the English language was becoming more prominent.

When you went to primary school, were your teachers Māori?

I probably had both Māori and Pākehā teachers. The two teachers who made an impact were Mrs Connie Katai and Nuki Williams. The boundaries of learning that they set for us were clearly defined and non-negotiable.

Did you like school?

I enjoyed school. I grew up in an area where most of us there were Māori. Not liking school wasn't an option because our parents got us up, dressed us, gave us kai and sent us off to school with our cut lunches, every day. If the bus broke down, we had to ride our horses to school or walk.

Was your marae near the school – was it a big part of your schooling years?

No, not really. The marae was close to the school but our mother was of the opinion that if we went to the marae we got in the way. So we were brought up with the marae tikanga at home. Although we didn't frequent the marae

as often as some of the other children, that home training helped us settle in to the marae easily. Hence the whakatauki, "Tangata I akona kit e kainga, tunga kit e marae, tau ana."

When you went to high school was that in the same town?

No, I won a government scholarship at Whangaparoua School and was shipped off to St Stephen's School.

How did you find that transition, Toka?

My world view was from from Ruatoria to Te Kaha. There are no skyscrapers in that scenario. We didn't have power then, but we had access to kaimoana, kai from the rivers, bush and whenua. Suddenly in just one day, when I left for St Stephens, I saw things that I had never seen before. The transition was awesome.

Can you remember what that felt like, if you just think back?

Well, I just looked at this new world that was out there and I took it all in really. I knew that my parents had a lot of faith in me going to get an education and I guess that simply turning around and going home was not an option. They had a belief in me and I just kept going. I remember going to Papakura and I was nearly hit by a car because I didn't know how to cross the street. I was lucky I had an older person with me.

Did you know anyone else there or did you go alone?

I went on the bus with my cousins. They were going to Queen Vic in Auckland, I got off the bus and wandered up this driveway, because that was the only way to go. As I walked up that driveway, I was confronted by this huge concrete building that was to be my home for a while. I wasn't scared or anything, but it was like walking into the unknown.

So how many times during the school year would you go back home?

I only went home in the holidays. The first time I went home was in the May school holidays, and it was quite funny actually when I think back because I was frightened of getting my feet dirty. I think the cuzzies thought I was whakahihi. I didn't even want to walk around barefoot on the grass. Before that I used to run barefoot on our metalled roads and walk in the mud even. Well, I guess that's what happens when you wear shoes for 14 weeks, for the first time in your life.

When you left St Stephens, did you look back and think that you were given a great opportunity?

Yes. I think for me at the time it was the right decision to go to that kind of a boarding school. I actually chose Te Aute because I filled in the form at school and took it home to get signed and my dad said I was going to St Stephens because that's where John Waitete was. Unfortunately when I arrived there he had left. Couldn't change schools though.

They must have had aspirations for you. When you came back at the end of each term, did your whānau talk about what you were going to do or did you make that decision?

Yes. Their aspirations for me were to be successful at school and to get a good job. While I was at Tipene (St Stephens), I made all the decisions related to my career path. I knew that the career I would finally choose had to be my "pay back" for the effort and hard work that my parents had to endure to keep me at school. I'm still honouring my parents now. Prior to me going to St Stephens, most of us looked at driving trucks or buses as a career.

Did it change your perspective going to St Stephens?

Yes it did. Working in close contact with other students created a positive competitive educational environment for us all to work towards achieving our goals.

So what did you choose after leaving the kura?

I went into teacher training. That was at Ardmore Teachers Training College not far from Papakura. I stayed there for two years.

Were there many other Māori enrolled at that time?

Yes, there were other Māori students enrolled at Ardmore. Some of the men and women in my year were from Māori boarding schools. So Ardmore was an extension of that environment.

That would have been another change as well, wouldn't it?

Yes. The lecturing staff were all non-Māori. So any matter relating to tikanga Māori and Māori students' welfare we dealt with ourselves or got assistance from Māori welfare officers. We had to learn to interact with members of the opposite sex and Pākehā students.

So Toka, you graduated from college and you started teaching?

Yes.

And did you go into a big school or was it a small country school. What was your pathway in teaching?

I chose to do country service first so I headed down to a place called Te Matai Māori School. It is now Te Kura Kaupapa o Te Matai.

And was the school one which was embedded in te reo and tikanga Māori?

No. It was a school where there were a lot of Māori children and three Māori teachers. The principal and the teacher in charge of the infants were Pākehā. Teachers and children in Māori schools had to cover the same curriculum subjects as Education Board schools.

How long were you there?

I was there for one year. During that time you were placed in a school for one year to complete your teacher training as a probationary assistant teacher. At the end of the third term if you met all your obligations as probationary assistant you would graduate as a trained teacher. I graduated in Rotorua.

Where did you go on leaving that school?

I went down to Raupunga, which is just south of Wairoa. I stayed there for a couple of years and from there I went right up to Moutautau District High School, which is close to Kawakawa. Māori schools became museum relics during that period.

So you shifted to a high school teaching position?

No, I went into a primary position but it was a district high school, similar to what is now known as an area school. I did do some secondary teaching while I was there.

Did you choose to get into any senior management roles during your teaching career?

I had mainly acting roles really. I was acting deputy principal at a couple of schools. I also became a senior teacher at another school. I was a course supervisor at Northland Polytechnic, an area supervisor in Career Services, Māori senior lecturer at the Auckland College of Education, a programme leader at Northland Polytechnic and for GSE acting regional manager Māori strategy and acting service manager.

What brought you into special education?

Was there a significant event or did it just happen?

In 1999 I became a Resource Teacher Learning and Behaviour (RTLB) in Whangarei. I held that position for five years. The move in to special education wasn't planned. Someone suggested I apply for a job in special education services (SES), as it was then, because they need a kaitakawaenga. I got the position and started at SES in July 2001 as a special education advisor/ kaitakawaenga.

It often happens that someone else sees your potential and you don't see it yourself.

Yes, probably.

Despite the fact that education is going down an inclusive pathway, our Māori tamariki appear to be struggling in many areas. What do think is going wrong for them?

That's a big question. If we could isolate one reason why our tamariki are struggling at school, RTLBs and some GSE field staff will probably have to find new jobs or go back into the classroom to teach. There are a number of reasons – whānau struggle with poverty, drugs, gambling, relationships or liquor, to name a few. Schools sometimes have environments where Māori tamariki have difficulty in becoming part of the school community. Sometimes our tamariki are unclear why they need to be at school every day.

While teacher trainees leave our universities with better qualifications, I'm not so sure about the ability of some to set goals, to plan how they are going to achieve their goals, to evaluate their work and plan to improve children's learning or to take them to a higher level of learning. I'm also not sure about the kind of training education faculties provide for working with children with behavioural and learning difficulties, and special needs.

From the special education perspective, how can we improve what we are doing in regards to Māori?

GSE has a very powerful Māori strategy. Its key achievement areas are clear and the symbolism of the Māori carved meeting house provides us with a strong and clear, but calm, message. Developing Māori capability needs to happen from the top down and bottom up. We need to give the Māori strategy, Te Urunga mai o Te Rā, higher and more visible profile.

You feel that there is a space for Māori at the management level?

Yes. I think we really need to have a look at encouraging Māori staff into management positions. We can't rely on the notion of growing Māori staff from within the organisation into management because the organisational and managerial experience is absent. So we have to target Māori leaders in other organisations and encourage them across to GSE. The other option is to encourage Māori staff to apply for management positions in outside organisations and hopefully they'll want to come back later.

I understand that you work alongside non-Māori in your role, Toka. What is the key message that you would give to our non-Māori colleagues who work with Māori tamariki and whānau?

To observe, to listen and to respect the whānau. To seek support from Māori staff or Māori in the community that you come into contact with. The message for Māori staff is to find a way to work with field staff without compromising their professional integrity.

Toka, when you were growing up, I'm just thinking about when you went to high school, and then on to training college – you have been required to walk in both worlds.

What is your view about that? How important is it to be able to do that?

In my role as district Māori advisor and a member of the district management team, understanding the Pākehā world view and the Māori world view is very important when one is trying to establish Māori protocols, procedures and tikanga into the work we do without marginalising the other culture.

So during your time with special education have you seen things move along? Do you feel that it's actually going in the right direction for Māori?

We have one Māori focus team in Aotearoa, four powhakarawa matauranga regional positions, several Māori service managers and pouarahi-a-takiwa positions. I have not included kaitakawaenga, SEA and E1 Māori because they are established positions. Success depends on where you are and who you are working with. There is some good work being done in GSE, but there is always room for improvement.

Do you think those years between teaching and becoming an RTLB were significant – and, if so, why?

Yes, because while you are teaching adults, you still need to plan and organise your work and make your presentations fun and worth their while turning up for your lectures.

You commented earlier that many young tamariki do not know or understand why they are at school (and therefore do not take everything out of the experience that they could). During your time working in adult education, had many of these adults learners come from that place?

I have come across a number of mature students in polytechnics, colleges of education and universities seeking a second chance at gaining educational qualifications.

You have done some presentations around leadership and your views on leadership have some powerful messages. What are the tensions for many Māori who adopt a more kaupapa Māori view of leadership, as opposed to the more Westernised perception – particularly in organisations like GSE?

The tensions for Māori who adopt a kaupapa Māori style of leadership can be overcome in a quiet, peaceful and well-organised manner. Tensions can occur from non-Māori not understanding kaupapa Māori and Māori not understanding that the leader is responsible for everyone. So the leader has to adopt a kia āta haere kaupapa (work steadily) and mahia ngā mahi I runga I te tika, te pona ma te aroha (be accurate, be truthful and compassionate).

What is your approach to leadership – how would you describe your leadership style?

I've never really considered myself to be a leader. People ask me to do things and I oblige. Whakanuia te mana o te tangata, ka noho māna hei whakahokia. (Treat people with respect and they will return that respect.)

I whānau mai au he Ngāti Porou.

I was born Ngāti Porou.

I tipu mai au ki roto o Te Whānau-ā-Tūwhakairiora.

I grew up in Te Whānau-ā-Tūwhakairiora.

Engari ko ngā mātua tipuna a ōku kōka, no Hokianga, no te awaawa o Mangakahia.

However, the ancestors of my mother are Ngāpuhi.

Ko tōku hoa rangatira no Ngāti Hine, no Ngāti Kororā.

My wife Pauline (neé Kawiti) is Ngāti Hine and Ngāti Kororā. We met at Ardmore Teachers' College.

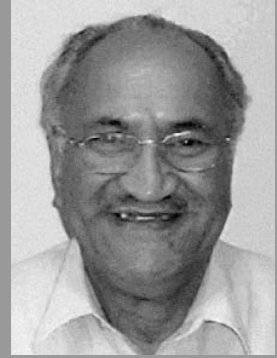
We have two sons, two daughters-in-law, and seven mokopuna with Māori names.

Mauriora ki a koutou katoa.

AUTHOR PROFILE

Sonja Bateman has affiliations to the Ngai Tahu tribe of the South Island and is an experienced special educator and practitioner. Her passion for improving educational outcomes for at-risk students has seen her move from classroom teacher, to Resource Teacher of Learning and Behaviour (RTLB), to her present position of Practice Advisor Māori – a national position – for the Ministry of Education; Special Education in New Zealand.

Tokararangi Totoro



Sonja Bateman



Whiti ki runga! Gifted and talented Māori learners

Dr Angus Macfarlane and Dr Roger Moltzen
University of Waikato, Hamilton



ABSTRACT

The importance of identifying and nurturing the gifts and talents of young people is now more widely accepted in New Zealand than it has been in the past. In this country the approach to meeting this challenge must reflect an understanding and acknowledgement of Māori conceptions of giftedness and talent. It is proposed here that the under-representation of Māori students in programmes and provisions for the gifted and talented is partly due to a mismatch between the more traditional western European approaches in this area and Māori conceptions and practices. However, it is also contended that efforts in this area will continue to disadvantage gifted and talented Māori students if the broader issues of power and control are not addressed in schools.

Research paper

KEYWORDS:

Gifted, Māori students, Māori culture, cultural differences, cultural values, culturally appropriate strategies.

The issues facing gifted Māori young people are common to many of the world's indigenous peoples. A primary reason for addressing these issues is the continued under-representation of Māori students in educational programmes for the gifted (Bevan-Brown, 1993, 2000, 2002; Keen, 2001; Ministry of Education, 2000; Moltzen, 1999)

Over the past two decades in particular, considerable effort has been directed at equipping New Zealand teachers to better cater for the increasing student ethnic diversity in their classrooms (Hill & Hawk, 2000; Ministry of Education, 2003; Moore, Anderson, Brown, Glynn, Macfarlane, Thomson & Timperley, 1999). As a consequence many teachers are now more appreciative of and knowledgeable about Māori culture and practices, and are more familiar with the ways these might be reflected in their teaching. However, according to Bishop and Glynn (1999), the views and values of the dominant culture remain disproportionately influential in many schools. Where perceptions of, and approaches to, giftedness are essentially Eurocentric, aspects of ability valued by Māori may be unrecognised and the expression, identification and nurturance of the gifts of many Māori students will be overlooked and undervalued.

Our understanding of issues pertaining to gifted Māori and the ways these might be addressed has been greatly aided by the work of Jill Bevan-Brown (Bevan-Brown, 2004).

Bevan-Brown contends that it is important to recognise that Māori are not a homogenous group and that while the issues may be common to many Māori, they will not apply to all.

A central issue is the difference between the more traditional view of giftedness and how Māori perceive the concept. Where the conceptualisation of giftedness in many western European societies has tended to emphasise characteristics associated with the ability to excel academically, and is seen as the preserve of a small minority, in Māoridom the concept is far broader and wide-ranging, and more widely distributed. Māori value abilities and 'qualities' and extend these to spiritual, cognitive, affective, aesthetic, artistic, psychomotor, social, intuitive, creative, leadership and cultural domains (Bevan-Brown, 1993). In contrast with the western European tradition, the Māori approach to giftedness is more holistic and inextricably intertwined with other Māori concepts. It is the Māori culture that provides the foundation for the emergence and development of special gifts.

Bevan-Brown reports that the gifts may be individual, or can be 'owned' by the group. The Māori participants in her research sometimes cited a group and not an individual as having a special ability. In a similar vein, "There is an inherent expectation that a person's gifts and talents will be used to benefit others" (Bevan-Brown, 2004, p. 179).

The implications for educators of a Māori view of giftedness are extensive. For example, the relationship between Māori culture and the demonstration of exceptional abilities is critical. Bevan-Brown (2004, p. 181) states that, "teachers must give gifted and talented Māori children opportunities and encouragement to develop their talents in a Māori-relevant context." For many teachers this requires an increase in their knowledge of Māoritanga (Māori culture). Bevan-Brown believes gifted Māori children need to be encouraged to develop their knowledge of, and pride in, their own culture. In an environment where their culture is valued and students are strong in their cultural identity, they would be more likely to feel confident about expressing their special abilities.

Many able Māori students do not identify as Māori because of low teacher expectations. Cathcart and Pou (1992) declare that some teachers do not expect to find giftedness amongst their Māori students. It would seem, therefore, that the identification of gifted Māori students calls for a number of comparatively different approaches from those that might

be considered appropriate for non-Māori. Arguably the most important message for teachers in identifying gifted Māori students is the need to provide what Jenkins, Moltzen and Macfarlane (2004) refer to as a culturally-safe and culturally-valuing environment. Further, Mitchell and Mitchell (1988) and Macfarlane (2004) propose that central to this provision is improving school experiences for Māori students, and in this context the pedagogical skills and the integrity of the classroom teacher are pivotal. Such a classroom environment increases the likelihood that these students' special abilities will emerge and flourish.

It is important that gifted programmes are extended to include the abilities and qualities valued by Māori. This does not mean that young people who are Māori do not possess abilities in the more traditional areas of talent – New Zealand has many examples of Māori who have achieved in science, mathematics, literature and in other fields. Nor does this mean incorporating approaches to giftedness that are completely out-of-step with contemporary models. As Bevan-Brown points out, the Māori concept is similar to Gagne's (1999) differentiated Giftedness-Talent Model and Gardner's (1993) multiple intelligences approach. The differences lie in the cultural-specificity of Māori talents, traditions and values, and in the interpretation of particular qualities and abilities.

It is very important that teachers work in partnership with Māori to identify the potential of gifted Māori learners and use culturally appropriate methods of identification (Bevan-Brown, 2004). The whānau, or extended family, can play a significant role in this process. While it is common practice for schools to invite parents to be part of the approach to recognising talent, Bevan-Brown contends that for Māori students it is appropriate to cast the net even wider, and to seek input from kaumatua (elders) and other whānau members.

In a similar manner, it is important that Māori are consulted in the design of programmes for gifted Māori students and are involved in supporting and encouraging this group of students. While an individualistic approach to developing talent may work for many non-Māori students, it may be counterproductive for gifted Māori students. Programmes and provisions that isolate gifted Māori students from their peers may result in these students dropping out. There is little doubt that providing for gifted Māori students in an inclusive setting is generally more appropriate than placing them in a 'special' or separate environment.

Jenkins (2002) contributes to the debate of salient issues, arguing that central to appropriate provision for gifted Māori students are matters of power and control. She contends that increasing the visibility of Māori giftedness is not about adding a Māori dimension to existing constructs and practices, but it is about significantly changing the very essence of the system itself. From this position, the realisation of Māori achievement and actualisation requires fundamental shifts in order to break down the power imbalances and subordination inherent in many New Zealand schools and classrooms. In her view, anything

short of addressing these issues in education is no more than a minor 'tinkering' with an inherently flawed structure, and as such will fall well short of identifying, providing for and valuing the talents of Māori students.

In New Zealand, we have begun the journey toward a better understanding of a Māori concept of giftedness and how we might effectively identify and respond to the talents of Māori students (whiti ki runga). However, it is clear that we still have a long way to go before our approaches can be considered bicultural and equitable. Part of the challenge, as Jenkins points out (2002), is to unpack the legacy of colonisation and to construct new approaches to education in an authentic bicultural discourse – a discourse valid for, and validating of, the culturally lived realities of both Māori and non-Māori.

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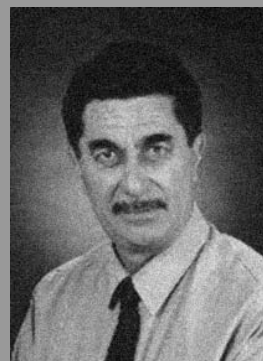
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Ecological practice: Illustrations from educational psychology in New Zealand

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ABSTRACT

Educational psychologists in most parts of the world report that they take ecological approaches to their work. But what does working ecologically mean? How do we recognise ecological practice?

This article discusses some salient aspects of the practice of psychologists who say they work ecologically. The first section of the paper presents a global perspective on current practice, considering critical points of the journey of educational psychology from its inception to the present day. This brief history highlights important features of current practice by contrasting them with previous ways of working. It makes reference to a selected number of the many theories that have influenced the progression of educational psychology. The history is followed by more detailed discussion of the particular theory currently emphasised in educational psychology literature. This discussion is built around four emerging themes in ecological practice:

1. Multi-systemic units of analysis.
2. Collaboration in multiple relationships.
3. Supportive learning environments.
4. Evidence-based practice.

To illustrate the practical application of each of these elements, the article refers to examples of New Zealand practice in which the ecological themes are evident.

Research paper

KEYWORDS:

Attachment behaviour, child development, education psychology, ecological perspective, resilience.

THE CHANGING PERSPECTIVE OF EDUCATIONAL PSYCHOLOGY

During the century-long history of educational psychology, the focus of research and practice has swayed in response to the movement of perspectives on human development. There is general agreement among educational psychologists today, that ecological understandings underpin their practice (see Pianta, 2005; Fantuzzo, McWayne, & Perry, 2004; Sheridan & Gutkin, 2000; Woolfson, Whaling, Stewart & Mosen, 2003). The theorists whose ideas hold most appeal for psychologists are those who have embedded understanding of development in the dynamic systems of the broader social environment. This focus on context resembles the earliest conceptualisations of educational psychology.

At the outset, educational psychology was a discipline concerned with the influence of a range of societal factors on the development of young people (Berliner, 1993). This community focus narrowed in response to modern society's increasing trust in scientific inquiry to produce definitive and universal understandings of human development (Alexander, 2003; Flynn, 1997).

The drive for efficiency in the newly industrialised Western world and wide-spread belief in the power of science to discover universal truth led researchers to study the abilities of the mind. Some psychologists, such as Henry Goddard, who translated the Binet-Simon IQ into English in 1908, were convinced that intelligence could be defined and measured, and that this measurement would identify those with skills or functional behaviours that would contribute to the productivity of the modern world. The chief determiner of human conduct, in Goddard's view, was a unitary inborn mental process known as intelligence (Plucker, 2003).

Psychologists endeavoured to isolate human actions and to study them apart from their social and cultural contexts. They assumed that all behaviours would eventually be quantified and measured and they involved themselves in a practice that reflected largely person-centred, deficit views of human action. From the time James Cattell established a psychological laboratory to study individual differences in mental abilities without the distraction of setting events, psychological researchers made efforts to ensure that the effects of contextual variables, considered extraneous to investigations, did not contaminate assessments. Some psychologists, including G. Stanley Hall, founder of the American Psychological Association, also took a strong interest in the individual differences of children and the degree to which individuals' measures of functioning veered from normative paths. Hall did not consider that such measures should be decontextualised, or analysed without taking into account other environmental variables, and suggested that intellectual development was influenced by genes, learning conditions, and the nature of social interaction (Berliner, 1993; Fagan & Wise, 2000). In Hall's view the laboratory was not the place to learn about human development. He proposed that purposeful and valid study could only occur in children's natural environments and that, furthermore, ordinary people in these settings could participate in the collection of information relevant to the investigation. Hall instigated the Child Study Movement to broaden the focus of scientific inquiry, but the profession

did not progress directly from this point. The Child Study Movement was successfully challenged by scientists who considered that Hall's research methods lacked sufficient rigour (Wozniak, 1999). Psychology had much to gain from adhering to a visible, measurable and genetic notion of human intelligence and its expression in behaviour, interpreted in isolation to the subjectivity of people's perspectives. The discipline maintained a comfortable place in society throughout the first half of the twentieth century on the promise that behaviours that might further the productivity of the industrialised world would eventually be identified and nurtured.

By the 1970s, sectors of the educational psychology community directed challenges at the tight scientific approach. Although some important psychological principles had been discovered through scientific research, psychologists observed that decontextualised research and practice did not correspond with the interactions they observed in the social environments of young learners. It did not help them explain or accommodate the diversity and complexity in their work situations. In addition, the usefulness of decontextualised methods, designed to improve learning and behaviour problems, was not systematically demonstrated (Moore, Anderson, Timperley, Glynn, Macfarlane, et al, 1999; Sheridan & Gutkin, 2000). Some psychologists called for increased attention to the interaction of factors influencing the education of young people. Cronbach pointed out that many of the products of social science research did not hold for long and cited decade discrepancies in the applicability of findings to demonstrate the need to imbed educational psychology in the socio-historical world of participants (Cronbach, 1975).

Deliberation on the rigidity of the traditional scientific process of inquiry and the dubious outcomes of practice during the middle years of the twentieth century led to new conceptualisations of the profession that incorporated many of the broad notions of practice evident at its establishment. Present day educational psychology is concerned with events in both the immediate situations of developing people and the wider societal influences on this development. "It is now routinely conceptualised in the literature as an interactive and contextualised process, the environment, both social and physical, being recognised as a powerful determinant of learning and behaviour" (Moore, 1998, p4). Ecological practice locates the forces that power social relationships and human activity in the interaction between individuals and their surrounding environment rather than within individuals alone (Christenson, 2004; Engelbrecht, 2004; Sheridan & Gutkin, 2000).

Ecological psychology involves the assumption that interpersonal circumstances and the meanings of interactions between individuals and their surrounding environments are socially constructed and unique to particular circumstances. Accordingly, psychologists recognise the multiple and individual subjective realities of those involved in their work in the field. They expect and value differences among people (Atkins, Graczyk, Frazier & Abdul-Adil, 2003; Sheridan & Gutkin, 2000; Pianta, 2005) Increasingly, methods of practice involve active collaborative examination and reconstruction of people's dynamic social worlds.

CURRENT EDUCATIONAL PSYCHOLOGY PRACTICE

The following section presents the four themes of ecological practice. Each theme is introduced with an example of New Zealand practice, followed by a comment on the theory that reflects this professional practice. The examples of 26 educational psychologists' practice have been extracted from a report of research by Ryba, Annan and Mentis (2001) who examined special educators' ways of working and the theoretical underpinnings of this practice. The research had used a semi-structured survey and interview procedure and required that participants recall, rather than recognise, salient aspects of their practice. Prior to the interview, participants completed questionnaires which formed the basis of the interviews. The survey questions that are relevant to the aspects of the study reported here included:

- What principles guide your practice?
- What methods or frameworks for practice do you emphasise in your work?
- What methods do you use to gather information?
- What methods do you use to develop support plans?

This is a new perspective on the previously reported information and aligns the psychologists' reports of practice with published ecological theory. Many psychologists interviewed in the Ryba et al study considered that their approach was ecological and described practices that fell into the four themes. While not all psychologists necessarily take an ecological approach to their work, the reports of those who do serve to demonstrate ways in which the espoused theory of the profession can be translated into practice in this country.

1. MULTI-SYSTEMIC UNITS OF ANALYSIS

Illustration from Practice

The psychologists indicated that their practice was guided by a range of theories of human development, the most common being those that supported them to consider the broad social environment. For example, participants described the theoretical foundations of their work as holistic, ecological, multi-element, social constructivist and social cognitive. Some mentioned that they were guided by Kaupapa Māori pedagogy, a way of understanding situations that considers the development of people in relation to the social, historical, cultural, physical and spiritual environment in which they develop. They reported that the works of several prominent theorists had strongly informed the practice. These included Uri Bronfenbrenner, William Glasser and Lev Vygotsky. Participants also explained that the theories of behaviourists such as B.F. Skinner and Albert Bandura continued to influence specific aspects of their practice. Several incorporated social constructivist approaches, such as narrative methods.

Theoretical Underpinnings of Multi-systemic Practice

Possibly the most prominent theorist to influence current educational psychology practice throughout the world is Bronfenbrenner. In 1977, Bronfenbrenner published *The Ecology of Human Development: Experiments by nature and design*, presenting an ecological theory that has served as a catalyst for massive change in direction for educational psychology (Sheridan & Gutkin, 2000).

Bronfenbrenner recognised that his approach contrasted sharply with the prevailing research models of the mid-twentieth century and considered that the methods adopted by psychologists during the scientific era blinded their vision of the environmental aspects that determined human development. Psychologists had, in Bronfenbrenner's view, developed methods and perspectives that greatly underestimated human capacities. Contexts of development had been viewed as static structures that did not take into account the ongoing processes that influenced the initiation or development of behaviour. He viewed environment or context as not just a single setting but one that was shaped by the influence of systems outside the immediate setting. This view is reminiscent of the view of John Dewey, who concluded that "control of individual actions is effected by the whole situation in which individuals are involved, in which they share and of which they are co-operative or interacting parts" (1938, p53).

The ecological model of human development encompasses the entire range of environmental influences on developing people and is based on two fundamental premises: each person is an inseparable part of a social system and disturbance is viewed as discordance or a lack of balance in the system in which an individual's demands or expectations of the environment are mismatched with their experience (Apter and Conoly, 1984). Bronfenbrenner portrayed the total environment or ecosystem as a set of nested structures or layers bound together by the interaction between them. As all levels of the ecology were implicated in human development, Bronfenbrenner encouraged researchers to look beyond single settings and explore the interaction between settings. Interactions between the levels, and between settings within levels, were potentially as powerful as the events occurring in the immediate settings of the developing person. Differences in behaviour of people in similar settings were explained through examination of the various meanings they ascribed to settings, their perspectives on the settings being influenced by their social and cultural background, and their lived experience. Individuals did not remain passive in the process of development but engaged with the surrounding world to codetermine their positions. Bronfenbrenner noted that settings from the same culture seemed to be similar while there were clear distinctions between settings from different cultures. He suggested that cultures possessed a 'blueprint' that determined the nature of each layer of the ecology. This blueprint was not static but contestable and, when challenged and altered, resulted in changes in the actions of individuals (Bronfenbrenner, 1979).

Bronfenbrenner proposed that development resulted through a dynamic set of reciprocal interactions rather than a single linear process. Analyses of the environments in which these interactions occurred required a systems approach to understanding and to the development of applicable intervention. As the extent to which any setting was able to lend positive support to a person depended largely on the existence and nature of social connections between settings, support for development was dependent on the situations of significant others. The role demands, stresses and supports stemming from other settings all played a part in determining the capability of those with a support role to offer such assistance.

While the profession of psychology has changed its focus from individuals to the social systems surrounding particular circumstances, psychologists have faced a long struggle in developing methods of practice that guide them to work in ecological ways. In addition, they have found themselves wrestling with less than receptive work environments where expectations of psychology practice reflect former perspectives (Moore et al, 1999). The movement from a practice intent on explaining human development through decontextualisation of behaviour and isolation of variables to one in which all aspects of young people's ecosystems are taken into account has required psychologists to re-examine their theories regarding their role and methods of service delivery. Psychologists have been asked to make a 180o turn. In many respects, those who accepted the shortcomings of decontextualised practice were faced with an unknown future and were required to place enormous challenges on their own world views. Not surprisingly, they were not always able to fully divest themselves of their regard for narrow abstractions of the functioning of individuals (Flynn, 1997). While modern methods of practice did not translate well to the field, psychologists, and the teachers and parents who were stakeholders in the process, were immersed in societal discourses about the superiority of knowledge gained through traditional scientific endeavour. Assessment methods in many school systems continued to focus solely on the isolated performance of individual students rather than the interaction between these performances and the surrounding systems (Gipps, 1994). In addition, some sectors of the profession feared that ecological methods threatened the rigour of their practice. Accordingly, resistance to change came from both inside and outside the profession (Bruner, 1996; Pajares, 2003). Despite the magnitude of the required shift in perspective, Bronfenbrenner has provided a strong, cohesive and well-articulated theory that has supported the profession to make much headway.

The ecological view of human development has challenged the profession to develop ways to manage the enormous complexities of dynamic systemic analysis. Psychologists must identify the influences on particular human interaction and understand the ways in which the various factors contribute to observed situations. Bronfenbrenner argued that the detection of "wide-ranging developmental influences becomes possible only if one employs a theoretical model that permits them to be observed" (1979, p4). Models of practice such as Functional Behaviour Assessment (Miller, Tansey & Hughes, 1998; Miller, 2000; Skiba, Waldron, Bahamonde, & Michalek, 1998), Problem Analysis, (Robinson, 1987) and Situational Analysis (Annan, 2005) are examples of frameworks for practice used by educational psychologists in New Zealand. These assessment frameworks support the collection and analysis of relevant information relating to a range of settings that represent significant ecological layers influencing referral situations.

2. COLLABORATION IN MULTIPLE RELATIONSHIPS

Illustration from Practice

The psychologists emphasised the value of their connections with others and reported that they had established multiple relationships with people who took various roles in the educational environments they examined in their work

In addition to the relationships they developed with students, teachers and parents, they worked to construct effective relationships with people from other disciplines, cultures and agencies. The vast majority of the psychologists (96 percent) said that they accessed most support for their work from their participation in their practice teams. They negotiated their respective roles and collaboratively planned procedures. This was clearly reflected in the comment of one participant who explained that “collaborative consultation with non-hierarchical decision-making is the key” to ecological practice (Ryba et al, 2001, p21).

Social Construction of Knowledge in Multiple Relationships

The ecological approach to understanding human development rests on the premise “that what matters for behaviour and development is the environment as it is perceived rather than as it may exist in objective reality” (Bronfenbrenner, 1979, p4). Development reflects, and is, the way people perceive and deal with their unique but interrelated environments. Fieldwork guided by Bronfenbrenner’s ecological model necessarily includes the active involvement of the developing person, the environment and significant players. It is integrally involved with the interaction among them. Ecological understandings highlight the need for the development of methods that support psychologists to understand the particular ways of knowing of all people involved in fieldwork.

The ecological viewpoint has challenged the belief that psychologists and other educational professionals can make accurate analyses of situations. It implies that what psychologists do offer are their own personal interpretations of observed situations based on their personal or professional beliefs. Ecological psychology has shed doubt on the dualistic concepts of normality and exceptionality, giving rise to more inclusionary views of learners. Psychologists’ helpfulness with regard to referral situations now lies in their ability to share professional knowledge and to work with those directly involved in referral situations, to co-construct analyses of their own circumstances. The psychologist’s role has become one of active participant in the construction of the emerging interpretation rather than that of objective observer.

Bronfenbrenner (1979) explained that each person perceives experience in any given context in their own way. People bring to each situation their social and cultural histories that serve to filter their perception of events and they demonstrate this in their varying characteristics. Challenges in describing contexts are compounded by the variation in the behaviours of each person in different settings and the perceptions, influenced by their own culture and experience, of observed events. Bronfenbrenner was not alone in considering the influence of culture and perspective on development. Vygotsky (1978), who described human development as an interactive process, considered that the socio-cultural aspects of any particular group determined both the nature of pedagogical processes used and the means for development of consciousness itself. The process of development was mediated by ‘tools’, most importantly, language. He portrayed reality as a system of managed

symbols; a system of meanings that served to support the development of social relations. In Vygotsky’s view, human development was first and foremost ‘social’, arising from social relations that then determined individual development.

Referral situations are frequently fraught with complex interactions between players and present as ill-structured or difficult to understand (Robinson, 1987). They are not experienced by all participants in the same way. Ecological psychology requires that psychologists develop methods and frameworks that support the development of relationships that foster motivated and harmonious engagement in the fieldwork process (Miller & Leyden, 1999). New partnerships with families and agencies concerned with the development of young people are becoming a familiar aspect of educational psychology practice. These partnerships give rise to the need for the development of skills to establish and maintain community networks of integrated services in ways that recognise the diversity that is a valued characteristic of today’s society. To be effective, psychologists must be competent at working in diverse circumstances, and strive to understand the many ways in which their various collaborative partners understand their world. Value patterns, concepts of right and wrong, and other culturally specific practices cannot be assumed by those who are facilitating fieldwork processes. Sheridan and Gutkin (2000) suggested that systems must be accessible with reference to physical, psychological, social, and cultural factors and oriented toward full participation, partnership and empowerment.

While educational psychologists accept social diversity and value its role in the creation of new knowledge, they also recognize the importance of creating common understandings between key participants. For example, the psychologists reported that when working across cultures, they either consulted or worked alongside people who had, or who could access, the particular knowledge required to construct applicable new solutions (Ministry of Education, 2004). Decontextualised analyses, or those constructed with insufficient cultural knowledge, provided little information to inform the development of acceptable alternatives.

3. SUPPORTIVE LEARNING ENVIRONMENTS

Illustration from Practice

The approach adopted by the majority of psychologists surveyed was to focus on identifying the strengths of the situations they encountered in order to build new solutions on these strengths (Ryba, et al, 2001). Many reported that their view of practice was generally optimistic, the purpose of their work being based on the belief that all children can learn. The psychologists mentioned the importance of inclusion of all children in educational programmes, one noting that “all students have a right to learn alongside same age peers (p18)”. They also explained that their work in each situation was individualised, designed to respond to particular needs and to improve the quality of children’s lives. The psychologists taking part in the study sought constructive rather than disruptive involvement and reported that they worked toward developing the least intrusive

alternative solutions. They considered contextual factors in the environments of those people, such as teachers, who supported children and implemented interventions.

(a) Inclusion

The inclusion of all people in educational settings is one of educational psychology's strongest values. Again, Vygotsky commented on this aspect of social interaction, explaining that his theory of human development was applicable to all learners. He chose not to draw distinctions between types of learners through the process of diagnosis and categorisation. Vygotsky viewed all children as being placed on a single continuum of educational ability, a strong departure from the deterministic biological perspectives in his own early twentieth century social and political environment where certain people were dismissed as uneducable (Wertsch & Bustamante Smolka, 1993). Vygotsky argued that the effectiveness of educational provision must be taken into account in every situation. He considered that the failure of any individual to progress satisfactorily to be a secondary problem originated from a primary problem found in the social relations associated with the individual concerned. Similar views are echoed in the words of many present day educators who advocate for systems that support effective and inclusive education for all children (Ballard, 1994; Fuchs & Fuchs, 1994; Slavin, 1996; Stainback & Stainback, 1996; Villa & Thousand, 2000).

(b) Positive Foundations for Intervention

The integration of narrative inquiry into psychologists' practice has provided some answers for those caught between the questioning of traditional methods developed in the scientific era and the vacuum created by the absence of tools to work ecologically. These tools, which include co-researching the effect of a problem situation on the lives of several individual participants, support the engagement of those people involved in referral situations on an everyday basis and who take varying perspectives on the matters of concern (White, 1988; White and Epston, 1990). In addition, White and Epston's narrative approach to understanding and reconstructing social situations has permitted many psychologists to support others to make sense of events, guiding them to seek solutions in the supportive aspects of situations rather than in the problems that so often dominate initial referrals.

Educational psychology assessment is no longer centred on the identification of deficits in students, or teachers and parents, but emphasises the detection, construction and consolidation of strong and respectful foundations for intervention. Psychologists working ecologically continue to identify the learning needs of students but must also invariably discern beneficial behaviours and positive environmental supports for development (Bear, Cavalier, & Manning, 2002; Barnett, 2002; Fantuzzo et al, 2003; Jenson, Olympia, Farley & Clark, 2004; Moore, 1998; Terjesen, Jacofsky, Froh & DiGuiseppe, 2004). The purpose of fieldwork in educational psychology is to make systems work for young people and their significant others; to construct solutions upon the unique strengths and helpful skills of students. In order to influence the systems that interact

with child behaviour and learning, these systems must first be understood or interpreted in ways that foster the construction of better alternatives to problematic situations.

This change in focus has coincided with the introduction of positive psychology (Seligman & Csikszentmihalyi, 2000), an approach that encourages psychologists to consider and understand not only people's experiences and consequent actions, but their emotions in response to their environments. Positive psychology integrates well with educational psychology's focus on supportive social systems and the development of interventions constructed on positive foundations (Barnett, Bell, Gilkey, Lentz, Graden, Stone & Smith, 1999; Waldron & McLeskey, 2000; Zins, Elias, Greenberg & Weissberg, 2000).

Positive psychology is the study of pleasant or desired subjective experience. It suggests that people who experience positive affect are more likely to demonstrate abilities such as creativity and flexibility, and to interpret events in ways that allow them to ascribe positive meaning to the events they observe. Seligman and Csikszentmihalyi propose that positive experiences are constructive, leading to exploration and mastery. Negative experiences, on the other hand, are destructive, leading to the stifling of development and the default to actions that are familiar and safe, regardless of their applicability to the particular situations. Clearly, such understandings have important implications for educational psychology with its focus on behaviour and learning (Chafouleas & Bray, 2004). In order to nurture positive affect, supportive aspects of environments must be identified or created and then maintained.

4. EVIDENCED-BASED PRACTICE

Illustration from Practice

Seventy-seven percent of the psychologists interviewed about their ways of working commented on the importance of systematic data-based methods of inquiry for decision-making. They noted that their practice was based on a coherent set of theories and identified specific practices derived from this knowledge. The participants stressed the importance of basing analyses on assessment data collected in collaboration with others and collaborative planning of interventions guided by sound analyses. They reported that working across cultural boundaries was an integral part of collaborative consultation rather than a separate component of practice (Ryba et al, 2001).

Evidence and Practice

Educational psychology is currently reviewing its stand on the place of evidence and is, more than ever, being required by schools, employers and the community to demonstrate sound practice (Hoagwood & Johnson, 2002). For example, the new Health Practitioners Competence Assurance Act (2003) requires that psychologists, and other health professionals, can establish that they meet standards set by their respective authorities to determine clinical, cultural and ethical competence. Educational psychology, with its history of alliance with the scientist practitioner position, is expectedly responsive to current demands for evidence-based practice. This response is visible in the emphasis

placed by the profession on the implementation of evidence-based interventions (Fox, 2003; Kratochwill & Shernof, 2004; Hoagwood, Burns, Kise, Ringeisen, & Schoenwald, 2003; White & Kratochwill, 2005). The current drive for an evidence-based practice reflects an increasingly rational political climate in schools in Organisation for Economic Cooperation and Development countries such as New Zealand, the UK, Canada and the US (Borman, Hewes, Overman & Brown, 2003; Fuhrman, 2002). However, this movement also signals the need to update traditional notions of evidence so that measures of effectiveness are aligned with current understandings of practice.

The relationship between research and practice for educational psychologists is strong. Psychologists, co-researching in their everyday practice with people involved in referral situations, will apply their theories of research to practice. Taking contextualised approaches to practice and recognising the social construction of knowledge does make the task of providing evidence of sound practice in educational psychology more complex than in previous eras. Individual, subjective experiences of people must be considered, as well as the objective views of observers. Clearly some factors will be easier to detect and more amenable to measurement than others. Accepting a broad notion of research does not mean that the scientific process has no place in the design and evaluation of interventions, rather, contemporary approaches to research and practice offer an enriched view of science and extend the range of questions that can be asked (Gergen, 2001; Potter, 2002; McCaslin & Hickey, 2001; Pratto, 2002; Rosiek, 2003). Psychologists continue to be mindful of evidence. However, recognition of the importance of context does alter the criteria by which evidence is determined.

The evidence-base of ecological educational psychology practice concerns the construction of the processes of practice, as well as the demonstration of the effectiveness of psychologists' work. With regard to the educational psychology process, two aspects must be considered. Firstly, the psychologists' background of knowledge of psychological theory and their ability and willingness to develop, and flexibly apply, practices derived from these understandings (Fox, 2003; Hughes, 2000). Secondly, the extent to which psychologists' practice reflects local cultural knowledge and the voices of individuals involved in particular situations. In short, applicable ecological understandings are constructed in relation to psychological theory and socio-cultural knowledge gained through collaborative inquiry. The most easily discernible form of evidence is located in the demonstration of the effectiveness of intervention. However, an ecological approach to practice assumes that such evidence is not established in isolation to the contexts in which the assessments are made. For example, Hoagwood and Johnson (2002), when discussing the measurement of effectiveness of intervention, also made reference to the quality, robustness and validity of service practices. Similarly, Kratochwill and Shernoff (2004) placed the evidence-base in the evaluation of interventions, but argued that the contexts in which the evidence-base designations are obtained and the contexts of implementation must be understood.

Evaluation of the effectiveness of psychologists' practice must involve a sufficient range of measures to take into account the various views of the multiple participants and the nature of the presenting issues and interventions. Peters & Heron (1993) offered criteria for sound or 'good' practice that may currently be applicable for psychologists and serve as a guide to evaluation. They described good practice as that which had an explicit theoretical base, concurred with current literature, produced desired outcomes and was considered by participants to possess a high degree of social validity. In ecological practice, social validity has an important part to play when making judgments regarding good practice as ways of working that are most acceptable to participants, and viable in practice, and are most likely to be those that can accommodate the perspectives of all participants.

Evidence-based practice in New Zealand is a professional and industrial concern. Psychologists must be prepared to practice in ways that meet all appropriate ethical, professional and legal standards to protect the rights of all of the people with whom they work (The New Zealand Psychological Society, 2002). The Ministry of Education: Special Education encourages its employees to engage in evidence-based practice and to apply methods of practice derived from applicable theories or legitimate knowledge. It values evidence-based practice for its capacity to restore links between theory, research and practice in the organisation (Ministry of Education, 2004). Irrespective of the theoretical orientation of the psychologist, each practitioner is asked to show that their approach to practice is guided by sound and coherent theory and that the outcomes are examined.

CONCLUSION

Educational psychologists who considered that they worked ecologically reported that their practice was influenced by a range of theories that contributed uniquely to their practice but shared a common foundation of socially mediated learning. They worked collaboratively with children, families, schools and other professionals to understand the relationships between environmental factors and to create constructive and situation-specific interventions. They recognised the value of the multiple professional relationships they developed with other people in the diverse range of settings associated with their work. These relationships provided knowledge that could complement psychologists' professional knowledge and that supported them to maintain an evidence-based approach to practice. The psychologists, guided by a belief that all children can learn and have the right to education, worked to promote inclusive education for all students.

Although many psychologists in New Zealand can demonstrate that they approach their work from an ecological perspective, the implementation of ecological methods has not always been straightforward. Challenges to ecological practice have come from within and outside educational psychology as the development of new methods has required that some aspects of previous practice be set aside. Educational psychology, considered from an ecological point of view, is a practice that itself reflects its own history and the specific contexts in which it is practiced. It is not

surprising, therefore, that barriers to the implementation of the espoused ecological methods of the profession reflect challenges from practitioners as well as from people involved in the contexts in which the practice occurs. However, the reports of the New Zealand psychologists who participated in the Ryba et al (2001) study suggest that these barriers are not insurmountable and that some practitioners have developed methods that support them to work consistently with their espoused theories.

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Note: All information from Ryba, Annan, and Mentis (2001) has been obtained from the public report, *Development of an integrated approach to behaviour support*.

AUTHOR PROFILE

Jean Annan is a senior lecturer in the College of Education at the Albany Campus of Massey University. She is a psychologist who coordinates the post-masters internship of the Educational Psychology training programme. She teaches course and conducts research in educational psychology and professional supervision.

Jean Annan



Transition in Action:

Targeting students with difficulties transitioning from Year 8 to Year 9

Denise Burrow

RTL, Mairehau Cluster, Christchurch



ABSTRACT

Research identifies that a percentage of students are less successful than others in transitioning from Year 8 to Year 9. A positive support programme was developed to target some of these students and help them ease from the nurturing climate within the primary system into the multi-faceted secondary environment.

Practice paper

KEYWORDS:

Transition to schools, transition programme.

BACKGROUND

Transitioning from primary schools to secondary can be problematic. Annie Overton (a Group Special Education Advisor) and I shared concerns about 'fragile' students at risk of surviving the transition from Year 8 into Year 9 in an urban co-ed high school. A potential slip in attitude, attendance and attainment is supported in literature (Deemer, McCotter & Smith, 2003; Foster, 1998; Graham & Hill, 2003; Hawk & Hill, 2001; Kent, 2003; Kirkpatrick, 1987; McGee, 1989; McGee, Ward, Gibbons & Harlow, 2003; Myatt, 2002; Sellman, 2000; Smith & Lee, 2002; Sutton, 2000). We turned this discussion into a four-session transition programme and a student booklet called *Getting Started at High School*. The programme sits well with Ruth Sutton's analogy of a 'social/personal bridge' in her book *Year 8 to Year 9: Overcoming the muddle in the middle* (2000). It provides an opportunity to help some students be less daunted crossing this bridge and assists them to realise that they have already successfully managed other changes.

Who were these students facing difficulties? Based on our cumulative experience, and with the collaboration of some principals from the contributing schools, we identified a group of 'fragile students'. We targeted Year 8 students who were Māori or Pasifika students (members of school populations known to be at risk), had RTL involvement during the year or consistently demonstrated any of the following characteristics:

- social skills (loners/acting out)
- no social independence
- difficulties with independent learning
- exhibited poor organisational skills
- learning/moderate behavioural difficulties.

Combinations of Year 8 teachers, special education needs coordinators, team leaders and deputy principals selected potential participants. One school involved parents in their decision making. We took all identified students. The number of students submitted for inclusion in the 'Increasing Success' programme in term four in 2002 to 2004 highlighted the importance in helping students manage the transition process.

Enough students were identified to form four groups and comprised 20-26 percent of the Year 9 intake. One principal described selection as "a kind of fence at the top rather than an ambulance at the bottom of the cliff". School groups were kept together and limited to eight to 10 students to enable open communication between us and the students. Anecdotal data was collected on students and any special considerations, such as the presence of their primary school teacher aide or their hearing support person. Participation in the programme was contingent on a caregiver/parent's permission.

All sessions were held away from a formal classroom to help provide a relaxed common environment free from the bias of a host school. Two sessions were held offsite at Group Special Education (GSE) premises, one at the high school when the students were in Year 8 and the last a few weeks down the track when they were in Year 9. The first three sessions lasted one and a half hours and were held over consecutive weeks in term four. The school counsellor who informally made the initial contact picked up and delivered the groups back to their schools in the school van.

SESSION ONE AND TWO

The first two sessions included:

- getting to know their group through informal games
- discussion on how they have already managed change
- defining change
- possible barriers to their success as Year 9s
- supports they could call on to help them, such as their personal qualities and strengths, and school personnel
- things that they needed to think about before starting as Year 9s, including transport and what time to get up in the mornings.

Written work was kept to a minimum.

The anecdotal information was interesting. Students knew little about the high school and common worries included:

- organising materials for each class without a personal desk
- interacting with different teachers
- homework
- uniform requirements
- smoking/drug use at school
- potential aggression from others
- uncertainty about adolescent culture, such as what was cool
- concerns about how the other students would relate to them at their stage of physical development.

Early in session one we found that behaviourally challenged students were unsuitable for the course, demanding more 1:1 attention than time permitted. The programme needed an organised, forward moving approach, broken with interactive games, while allowing impromptu discussion, and a drink and biscuit break. When a group was unsettled we adapted the programme accordingly, by using practical gym type activities to promote group skills, less circle discussion and minimal pen activities.

SESSION THREE

Session three was at the high school and focused on meeting a sample from the school community, including administration and teaching staff, the Year 9 dean, cultural supports, and some Year 9 and 10 students who used to go to their school. There was a question time (panel form) and a short walkabout in pairs with the high school students. We set goals and wrote them on a card, and the students took their booklets home.

SESSION FOUR

Session four served three purposes. Firstly, we could tune in to the students in small groups to see how things were going for them socially, and in their school work and any sport/club involvement. In the six discussion groups, students identified the things they particularly liked, such as making new friends, finding it easy to get around the school, and having some old friends in their classes. Secondly we could find out how the programme sessions worked for them. They enjoyed the interactive games, informal discussions and having their own booklets to take away. Students said “the games were fun” and “the goal setting was good”. Students had the opportunity to verify or change the goal they set in session three. This was written on a card, laminated and posted out to them. Finally, we could check that they were able to tell us who they could turn to for help in the school community.

PARENTS ONLY

The final session was an early evening parent and whānau meeting, which covered change and how parents were a part of the transition process. The high school library was the venue, and this was another opportunity for them to set foot on school grounds. Parental written feedback indicated they appreciated the opportunity to attend this parent only evening.

Parents were very positive about the programme – their children had talked more about going to secondary school. The parents enjoyed being involved with the ‘homework’ exercise. Comments about their children’s reactions and experiences included:

- gave her reassurance that it wasn’t so scary going to another school
- gave me a feeling of trust as a parent
- he was more relaxed and less nervous when the first day eventually came
- he was more confident about starting
- he became familiar with other pupils, didn’t feel as if he was the only one
- familiarised with new environment
- could put a face to some staff members
- made last term of primary more enjoyable.

CONTRIBUTING SCHOOLS’ FEEDBACK

Principals from the contributing schools felt that the opportunity for socially fragile students to access support was very useful, because they are often overlooked. They considered students who were experiencing a number of significant events outside school, such as a chronically ill parent or living away from home and those presenting learning/behavioural problems at school particularly benefited from their involvement in the programme.

EVALUATION

After running the programme for over two years, I needed to know if the students felt this had helped to ease them from the nurturing climate in the primary system into the multi-faceted, more formal secondary environment. Students were asked to complete a written questionnaire, at the beginning of the first session, at the end of the third session and then as Year 9s – see Appendix. This questionnaire was a modified version of one by Don Payne, workshop leader at the centre for educational leadership, Christchurch College of Education in 2003. Overall a shift in perceptions was noticeable in nine out of 35 items between sessions one and three, when the students were Year 8s, and this increased between sessions three and four, when the students were Year 9s. Changes were made for many of the students in our programme in a number of areas:

1. They were no longer afraid of getting lost.
2. They found the high school wasn’t too big.
3. They did not find it difficult to get from one class to another on time.
4. They found knowing their way around the high school wasn’t a problem.
5. They were less worried that teachers would pick on them.
6. They did not think new teachers wouldn’t be interested in them.
7. They did not think there was a teacher who wouldn’t like them.
8. They found homework was not much harder and they didn’t need extra help with it.

9. They were not worried about how much homework they would get.
10. They were not worried about making new friends.
11. They did not think Year 8 was better.
12. They found other students did not tease them.
13. They were not scared of being bullied.
14. The Year 9 work was not too hard.

RESULTS

Overall the targeted students were helped with attitude, attendance and attainment. Quantitative data, collated from the first students on the programme, showed 28 out of the 35 students still attend the high school, now as Year 11s. Table one shows further data:

TABLE ONE

n = 35	students in programme	students not in programme
Average of total year student attendance	92.8%	92.5%
Total high school's behavioural referrals	11	18
Total stand-downs	2 (one for four days & one for five days)	3 (one for one day, one for two days & one for four days)
Total suspensions	1	0

Note: the comparison group 'students not in programme' were randomly selected from the total Year 9 intake roll in 2003 by using every sixth student's data.

Accumulating informal supplementary qualitative data from the students was an unexpected plus from being involved in the programme for me and for the high school counsellor. The data from the contributing schools and the students' surveys had the potential to signpost possible modification of curriculum learning programmes, to heighten awareness of support for Year 9 teachers for in-class interventions, and to help build Year 9 dean's, Māori/Pasifika, RTLB mentoring and pastoral care systems.

CONCLUSION

Transitioning Year 8 to Year 9 at an urban co-ed high school was going to be daunting for a targeted group of students who were already identified as 'fragile'. When I did the numbers, attendance hadn't dipped and attitudes were mostly positive. Long-term effects on attendance and learning may be doubtful, given it is a brief programme, but it was inexpensive to run, fun to do and broke down barriers between staff and students. The fact that it made a difference was noted by students and their parents.

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AUTHOR PROFILE

Denise Burrow has been an RTLB in the Mairehau Cluster for three years. She has taught extensively as a classroom teacher, a specialist subject teacher, and with individuals who have specific learning disabilities. Denise followed a B.Ed with M.Ed second class honours (Division 1) in special education at Massey in 2000. She has always been involved in helping students maximise their learning opportunities, mainly at Year 7-12 levels.

ACKNOWLEDGEMENT

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APPENDIX

CONFIDENTIAL SURVEY – 2005

A = Agree DA = Strongly Disagree

1.	Year 9 will be great	A						DA
2.	The homework will be much harder in Year 9	A						DA
3.	I am worried about subjects that I have not done before	A						DA
4.	I think I will do very well in all subjects	A						DA
5.	I will need extra help with homework	A						DA
6.	It will be easy to make friends with other students at high school	A						DA
7.	It will be difficult getting to know new teachers	A						DA
8.	I am afraid of getting lost	A						DA
9.	There will be too much work in Year 9	A						DA
10.	Other children will push me around	A						DA
11.	My friends will change	A						DA
12.	It will be good to have more work to do after school	A						DA
13.	I am worried about making new friends	A						DA
14.	Year 8 is better	A						DA
15.	I know there is a teacher who won't like me	A						DA
16.	I am looking forward to finding my way around the new classes	A						DA
17.	My new teachers won't be interested in me	A						DA
18.	I think there is a lot of bullying in the high school	A						DA
19.	Learning new subjects will be difficult	A						DA
20.	I am worried how much homework there will be	A						DA
21.	It is important that I make friends quickly	A						DA
22.	I will be happier when I am in Year 9	A						DA
23.	I think the other students will tease me	A						DA
24.	The high school is too big	A						DA
25.	The work in Year 9 will be too hard for me	A						DA
26.	I am scared of being bullied by the high school students	A						DA
27.	I am looking forward to Year 9	A						DA
28.	I will have to do more homework	A						DA
29.	I hope that I can stay with my old friends	A						DA
30.	I am worried about going to Year 9	A						DA
31.	Teachers in Year 9 are nicer	A						DA
32.	It will be difficult getting from one class to another on time	A						DA
33.	I am worried teachers will pick on me	A						DA
34.	Some older students will be nasty to me	A						DA
35.	Getting to know my way around the high school will be a problem	A						DA

Index for Inclusion

Allister Smith

Principal, Central Normal School, Palmerston North



ABSTRACT

Index for Inclusion is a programme to assist in developing learning and participation in schools. It was written by Tony Booth and Mel Ainscow from the Centre for Studies on Inclusive Education, UK. Central Normal School was pleased to have the opportunity to trial this programme.

Practice paper

KEYWORDS:

Inclusion, inclusive schools, school culture.

INDEX FOR INCLUSION TRIAL

Central Normal School has had a policy of inclusion for children with special needs since moving away from 'special classes' in 1989. Our work in special education has developed significantly through the years and we believed that we had very good systems in place, as well as able and experienced staff providing effective programmes. We are decile 5, with a roll of 516 students Year 0 to 6, and 18 students on the Ongoing Reviewable Resourcing Scheme. We are directly resourced and have a significant team of teaching and support staff working in special education. There are six bilingual classes at level 2 te reo Māori, which have 50 to 80 percent of their programme in te reo Māori. We have a further 30 children, for whom English is a second language, adding another dimension and interest to the school community.

We promote our school as one with a culture of inclusion that meets the learning and social needs of a diverse range of children. We felt that the Index would be an excellent tool to get feedback from all involved in the school and support us in setting goals and directions for development for the next few years. It was apparent that data gathered could give us wide ranging feedback relating to many aspects of the school on a broader base than our special education programmes.

The Index was introduced to us by a facilitator, who shared the document with the senior management of the school, attended all the committee meetings and ensured that we were informed and kept up with the planned programme. We found the Index to be a document that, although written for the British school system, was set up so if modified to meet the needs of a particular school community, it would give excellent feedback. The three key elements which explore culture, policy and practice would fit well into the practice of a New Zealand school. We hoped that by this, it would not only affirm good practice, but also indicate any gaps we may not be aware of.

THE STEERING COMMITTEE

After discussing the use of the Index with the board of trustees (BOT) and the staff, and receiving a favourable response to trialling it in the school, a steering committee was formed. We wished to have a good representation of the school community and were pleased when three members of the BOT showed a willingness to be involved, a parent from the Māori community, a Chinese parent, the senior management team of the school (including the principal) and a psychologist from the Ministry of Education Group Special Education.

Our facilitator provided each member of the committee with a copy of the Index to read, after which we met to discuss the direction that we would take. It was decided to initially focus on the indicators relating to school culture because we all believed that culture is the foundation on which all else develops. The committee took some time rewording a number of indicator questions so that a questionnaire could be sent out to the community that fitted both the New Zealand and Central Normal contexts. As well as some rewording of questions, it was important to us that there were questions relating to the place of Māori and ethnic minorities in the school.

The issue of translations was raised and we consulted to see which languages we may need translating. The questionnaire was then translated into Mandarin and Tongan. The group also decided that it was important to hear the voices of the children. A further task then was to reword a number of the questions from the Index to be used with the children. We decided to include children from Years 4 to 6.

INFORMING THE COMMUNITY

Before we distributed the questionnaire, the school community was told about the Index in the regular school newsletter. We wanted them to be fully involved and urged them to participate and respond to the questionnaire. Classroom teachers talked about it with their children and return boxes were placed in each room with a class list attached. Teachers encouraged and cajoled, and the class with the highest percentage of returns was offered a treat. There was significant interest, especially when the returns came in. The children were praised and encouraged to keep talking at home about the questionnaire. For two parent families two questionnaires went home so that both parents or caregivers could respond separately if they so chose.

The questionnaire for the children was also taken from the Index and adjusted for our school. It was important that the children could readily relate to the questions. A set of instructions was provided for each of the teachers so that all children got the same message. We learnt an important lesson regarding questions for children. They need to be very clear and explicit and leave no room for a range of interpretations. The children were also encouraged to write a sentence or two sharing their feelings about the school, which many of them did.

FEEDBACK

We were delighted to get close to an 80 percent return of the questionnaires and also fortunate to have some graduate assistants from Massey University available to do the initial analysis for us. Numbers of parents responded with comments, questions or statements that added further depth to the responses. When the feedback came in to the school, we were able to respond immediately through the newsletters to some of the issues raised. A section called 'sharing the big picture' gave parents the overall results of the questionnaire and specific topics were covered each month. These statements included information about the teams' names of the school, the teaching of Te Reo/Tikanga Māori and behaviour management. The committee talked through the analysed responses from the adults and, apart from the many areas that affirmed the culture of the school, three specific areas emerged that will lead to further discussion and development.

1. A number of adults responding felt they needed further information about what goes on in the school. They felt that they didn't have enough information to give accurate responses in some areas.
2. There was a lack of knowledge and understanding of how the staff and the BOT worked together for the benefit of learning and teaching.
3. A response, mainly from staff, suggested that the school could be doing more in support of children for whom English is a second language.

A group of children was spoken with by two committee members to get further insight from the information gathered from the Year 4 to 6 children. There were concerns from them about the limited number of teachers on 'duty' in the playground, about adults not listening to them and whether or not they were always expected to do their best. Information gained from the adult questionnaire and from the children was shared with the BOT and taken into consideration when the development plan for 2005 was developed and the strategic plan adjusted.

CONCLUSION

The responses to the Index questionnaire have strongly affirmed the culture of the school as an inclusive and welcoming place where children are well supported in their learning. We have been able to readily respond to a number of issues raised by parents, and to give information and add to understanding about the school and its programmes. The areas discussed for development have been included in our plans for the future.

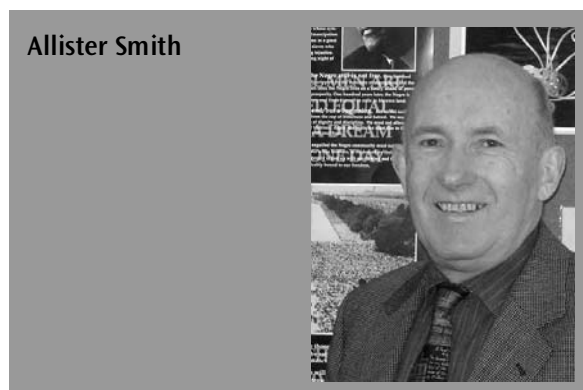
We believe that the Index for Inclusion can be a valuable and effective tool for the New Zealand schools. Put in place as a one year programme, it gives a school time to examine culture, policy and practice in any area chosen for development. Time is needed to select the aspect of the index that will be most useful to the school. There is a wide bank of useful questions already prepared but these need adjusting to meet the needs of an individual school. The senior management of the school needs to be involved to ensure that there is widespread involvement and organisation. Time is needed to ensure a good coverage of the community and that the information gathered is well analysed. Having a facilitator is a wonderful asset in helping the school keep focused and work through to a stage where the data gathered will meaningfully support future development.

The Index for Inclusion, developing learning and participation in schools, is a great way to get useful feedback from the whole school community, which will assist the school to develop for the benefit of all students' learning.

I would be happy to share our experiences in the use of the Index and I can be contacted at principal@centralnormal.school.nz

AUTHOR PROFILE

Allister Smith is the Principal of Central Normal School in Palmerston North. The school is very proud of its tradition as Palmerston North's original school and the current programmes of teaching and learning. Two particular aspects of special character are the significant work carried out in Inclusive Special Education and the success of the bilingual team Te Arawaru.



Two interventions that enhance the metacognition of students with disabilities: Cognitive cue cards and correspondence training

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ABSTRACT

This paper outlines and reviews two types of interventions used with students with learning disabilities. Cognitive cue cards are regarded as a form of cognitive intervention and correspondence training is regarded as a behavioural intervention. It is concluded that both kinds of interventions are valuable and result in improvements in the metacognitive capabilities of learners with learning disabilities.

Practice paper

KEYWORDS

Metacognition, learning difficulties, cognitive techniques.

Over the past 25 years a number of educators have developed strategies for improving learning based upon the concept of metacognition (our “thinking about our thinking”) popularized by cognitive theorists such as Robert Sternberg (1985). There has been considerable associated research which has tended to show that fostering metacognition does improve the learning of students. This research includes studies that demonstrate the impact of metacognitive interventions on ordinary learners (for example Desoete, Roeyers and De Clercq, 2003). It also includes a number of other studies showing that metacognitive interventions can benefit learners with learning difficulties (for example Borkowski, 1992, Mason 2004). The first part of this paper considers a strategy for fostering metacognition utilised in several recent metacognitive intervention studies. The second part of this paper outlines correspondence training methods (derived from applied behaviour analysis) and considers the possible cognitive effects of this approach. The purpose of the paper is to draw attention to the similarity between the two approaches and to emphasise the value of such interventions as means of developing metacognitive awareness amongst students with intellectual disabilities

COGNITIVE CUE CARDS FOR DEVELOPING COGNITIVE CONTROL

Metacognitive interventions often take the form of lists of memory cues in the form of lists of learning step cues on cards. These have been termed “cognitive credit cards” by Edmonds (2000) which have their value in fostering students’ metacognitive development. To design the cognitive credit card cues, Edmonds suggests that the teacher or assistant gets the child to answer the following questions:

What do you need to get started?

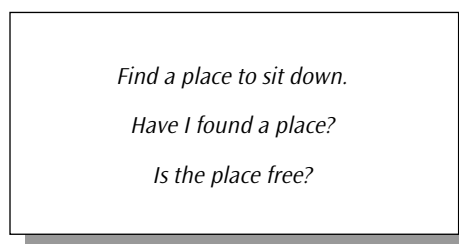
What is the next step?

How will you know if you have remembered the next step?

How will you check if your thinking is working?

A cognitive credit card could be as simple as the one shown in Figure 1 to cue a child in finding a place near the front of a class. Advocates of cognitive cue cards suggest that learners benefit by having such cards providing exact cognitive instructions, as they facilitate the process of students thinking about their thinking and monitoring their cognitive steps. However, there is nothing especially new or clever about the use of such cards, nor indeed does the utilisation of cognitive credit cards indicate the psychological persuasion of the user. The great behaviourist psychologist B.F. Skinner in his later life advocated the utilisation of cue cards similar to the cognitive credit cards to help free up some space in his great mind as he experienced diminished performance due to aging.

FIGURE 1. A SIMPLE COGNITIVE CREDIT CARD.

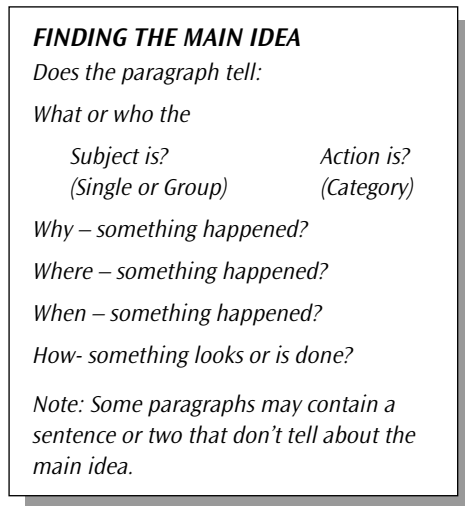


The cognitive credit card suggestion of Edmonds is similar to the metacognitive approach taken by Jitendra, Hoppes, and Yan (2000) to enhance students ability to obtain the main theme in text comprehension. They provided cue cards such as that below and had their subjects tick off when the required strategies had been retrieved and carried out. The cue card indicates the cognitive outcome that is being sought at a particular step and the student had to check it to indicate:

1. That they had read the paragraph.
2. That they used the cue card to recall the strategy.
3. That they applied the strategy.
4. That they had written down the result of the strategy.

Jitendra, Hoppes, and Yan (2000) found that having cue cards such as that in Figure 1 along with monitoring instructions helped students learn to extract main ideas.

FIGURE 2. FINDING THE MAIN IDEA CUE CARD.

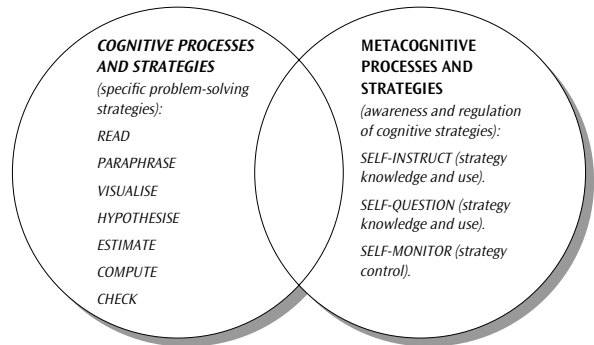


They had some suggestions about why students were assisted:

“Results also provide support for student’s positive attitudes toward strategy and self-monitoring instructional procedures used in the study. Although students did not indicate the desire to retain the prompt card following the study, the use of the permanent prompt during self-monitoring seemed to help the student in two ways. First it provided them with access to cues for recalling the strategy, thus reducing memory demands often placed on students with learning disabilities (McIntyre, Test, Cook & Beattie, 1991). Second, the prompt enabled students to focus on strategy application rather than on strategy recall.” (p. 136).

Both approaches discussed above are similar to the Say/Do/Check intervention which has used by Montague, Warger, and Morgan (2000) and has found to benefit students’ mathematics learning. In this intervention students go through the steps of stating in their own words the cognitive strategies that they will use (cued by instructions), they question themselves on whether they have indeed used the strategy, and monitor whether the strategy is working (to produce the desired outcome). Thus, metacognitive processes are brought to bear to regulate cognitive processes as exemplified in Montague (1992).

FIGURE 3. OVERLAP OF COGNITIVE AND METACOGNITIVE PROCESSES AFTER MONTAGUE (1992).

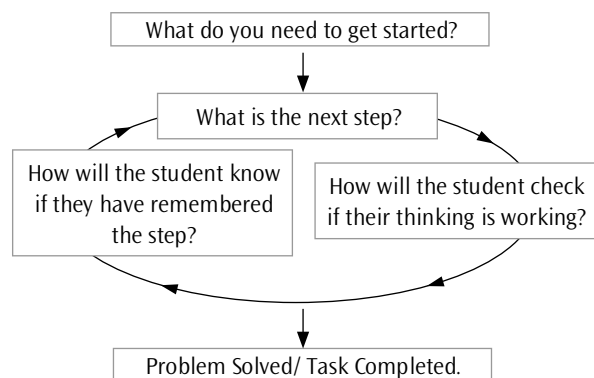


PREPARATION OF A COGNITIVE CREDIT CARD

The research we have reviewed indicates that a well designed cognitive cue card will improve the efficiency of student information processing, help the learner become more familiar with their thinking processes, encourage their independent learning.

Designing cognitive cues for interventions such as those in the reviewed research involves a process like that outlined in Figure 4. In order to develop a plan containing both cognitive and metacognitive elements the designers iterate through the questions contained in the figure.

FIGURE 4. THE ITERATIVE PROCESS OF DESIGNING A COGNITIVE CREDIT CARD.



The actual development of a cognitive credit card requires flexibility. Initially a cognitive credit card may contain quite strong procedural hints as the strategy steps for solving a problem may be quite new to the student. Over time, the card may be modified because students are now able to accurately state the next procedural step without elaborate cuing and only the self-monitoring steps are required.

The card format itself can be varied. For example Scott and Vitale (2003) describe a “writing wheel” for cuing writing in which only currently relevant cues are to be seen on the wheel at a particular point of time. In the example to be found in Appendix I, the number and nature of cues might suggest that a series of separate cards be constructed because there may be too much information for just one card. Utilising pictures on a cognitive credit card may be advantageous for many children with intellectual disabilities and who may have difficulties with text-based instructions.

In practice developing a cognitive cue card can be achieved by having the student interact with the instructor over the academic problem being considered. The steps for the card are best if they emerge from a teaching situation containing reflection, self-statement and humor. One approach that I have found useful is in involving the child in a form of reciprocal teaching. I have found that when I take on the role of “dumb” adult. Children are all too happy to scaffold my attempts to carry out a task by telling me what I should do at any step (it is a low anxiety situation when another is the bumbling fool). Where the task is one that is not familiar, sometimes it takes a very clever “dumber than dumb” instructor to allow the child to develop in their own words the sequence of steps involved in the performance task (and in the monitoring of task performance). When the student has been actively involved in the construction of their cognitive credit card, then that in itself is an opportunity for the child to reflect on their metacognitive processes. What they have written on their card should seem familiar and indeed cue them through their task or problem.

UTILISING A COGNITIVE CREDIT CARD

In utilising a cognitive credit card students are cued by the card through the cognitive steps towards obtaining an academic goal and as part of each step they:

- SAY self-instructions of what to do before and while performing actions.
- ASK questions to stay on task, regulate performance, and verify accuracy.
- CHECK by self-monitoring that everything is done correctly throughout.

The steps are listed on the card and the student ticks off the card as they go through their cognitive and metacognitive steps.

CORRESPONDENCE TRAINING APPROACHES FOR CHILDREN WITH DISABILITIES

Risley and Hart (1968) working with young children, developed a correspondence training approach that involved rewarding students for accurately matching what they say they will do with what they actually do. Correspondence

training interventions involve components of “Say”, “Do”, and “Report” required of the child. Some studies are more “Say-Do” studies emphasising the correspondence of prior statements and actual behaviour. Other studies emphasise “Do-Say” matching of what actually occurs with what is reported. Bevill, Davis, Clees, and Gast (2004) review the effectiveness of correspondence training in studies over the past 35 years and report that while the intervention has a long history of effectiveness, its potential for use for young children with disabilities remains largely unrealised.

Correspondence training with reinforcement contingent upon “say, do, report” having been successfully completed has been found effective as intervention for increasing the verbal behaviour of socially withdrawn children (Osnes, Guevremont, & Stokes, 1986), as well as a range of other social behaviours in children with social skills deficits (Guevremont, Osnes & Stokes, 1986). Odom, Brown, Frey, Karasu and Smith-Canter (2003) cite Shearer Kohler, Buchan and McCullough (1992) and note their introduction of self-monitoring to autistic children as an instance of a successful intervention involving correspondence training. This training resulted in young children with autism to monitoring their own social interactions and increased their interactions with peers.

For children with language disabilities the “say” and the “report” cannot always occur only via verbal communication and instead for these children there must be other forms of communication. In spite of this limitation, applications of correspondence training have been used in studies of children with language disabilities. Luciano-Soriano, Molina-Cobos and Gomez-Becerra (2000) used correspondence training with subjects with very limited language where part of the “say” and “report” communication involved pointing to drawings of desired behaviours. Stokes, Cameron, Dorsey and Fleming (2004) demonstrated that correspondence training could be used as an intervention for teaching complex skills to nonverbal subjects in a study involving acquisition of ten step personal hygiene skills.

Anecdotally, the author introduced a form of correspondence training to the task of having his son, a 9-year-old male with cerebral palsy, intellectual disability and language impairment, learn to accurately “point Percy at the porcelain” (urinate without spraying on the floor). A series of one word language cues were devised which included:

- Lift (the toilet seat)
- hold (your penis)
- point (at the water)
- flush (flush)
- wash (your hands).

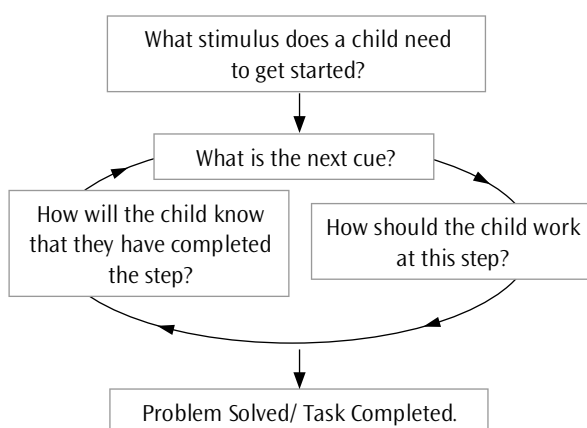
The first phase of the training involved familiarisation with the word cues and social reinforcement occurred for remembering the sequence. Following this phase, there was training emphasising the congruence of saying, doing, and accurately reporting. Again social reinforcement was used. At this point of the training, there was a dramatic improvement in accurate performance of the task.

Perhaps the most impressive aspect of the intervention was witnessing the vocalisation of the cues at each step as my son was at the toilet and not aware of being observed. My very strong impression was that he felt that having these cues and verbalising them was helping him at this task (and that he was monitoring his task progress through the cues).

PREPARATION OF CORRESPONDENCE TRAINING CUE SEQUENCES

The design of correspondence training involves consideration of several cues. There needs to be consideration of the cuing of “say” elements, the cuing of “do” actions, and the development of an understanding of the appropriate cues to “report” successful completion of a desired behaviour. Thus, the design of a correspondence training cue sequence has much in common with the approach to designing a cognitive credit card outlined above. Figure 5 below shows the questions involved in designing a correspondence training sequence for a complex task such as that described by Stokes et al (2004). It is very similar to the process for the design of cognitive cue cards outline in Figure 4 in that what is involved is iteration through the task steps in order to develop a plan containing both stimulus cues, task step processing and monitoring elements.

FIGURE 5. THE ITERATIVE PROCESS FOR A CORRESPONDENCE TRAINING PLAN.



As with cognitive cue cards, the basic sequence of identifying a step, carrying it out, and checking the success of the operation still holds in correspondence training but the following differences need to be considered. Low functioning children with limited language require a different approach to foster metacognitive development through cognitive cues and self-monitoring.

1. There may be the need to spend more time in designing the step sequence by the teacher so that it corresponds to steps within the capabilities of a low-functioning child. (A detailed and ecologically valid task analysis).
2. The step sequence will need to be conveyed visually utilising pictures, graphics, or icons for learners who have difficulty with text-based instructions. (c.f. Luciano-Soriano, Molina-Cobos, Gomez-Becerra, 2000). The value of visual stimuli for cuing student with cognitive disabilities is well recognised by those developing programmes for such students (e.g. Adams, 1997).

3. The encoding of what to do at each step may not be in the form of oral or written language, but via recollection of modelled procedures.
4. Rather than using cognitive cues in the form of a list which the child refers to, because the child may lose their place and become confused, there may be use of a flip card sequence (or alternatively a velcro list from which completed steps can be removed).
5. For nonverbal children another way of communicating satisfactory accomplishment by the child is essential. Modelling the utilisation of a thumbs up signal, or the pressing of a Big Mac saying “done” could be the way to develop signalling that self-monitoring of the outcomes success has been achieved.

A CORRESPONDENCE CUE CARD SEQUENCE FOR A NONVERBAL CHILD

An example of a correspondence cue card system for putting shoes on is contained in Appendix II. In utilising a cue card sequence with self-monitoring instructions, students are cued by the card through the steps towards obtaining a goal and at each step they monitor performance. The operations described above now become:

- LOOK to the relevant cue before and while performing actions.
- PROCESS to stay on task, regulate performance, and verify accuracy.
- REPORT by self-monitoring that everything is done correctly throughout and signaling step completion.

Each step is carried out in order to get to the next card. The child can “tick off the step” as they turn the card or signal that it should be turned. They can receive reinforcement at that point if there is correspondence.

The approach is dependent on the development of some level of self-initiated communicative behaviour. In particular Autistic students who are not currently self-initiating responses may only benefit from utilising self-monitoring (correspondence training) after they have shown a development in their ability to self-initiate communicative behaviour. For such students getting them past stage one of PECs would set them up for success at this more demanding procedure.

CONCLUSION

The research indicates that students with learning difficulties can be helped by design of cognitive cues (cognitive cue cards), which they can refer to and compare as they carry out task steps and report. As well as being cognitive cues, the value of such cards is in the child’s development of self-monitoring and their metacognitive capabilities. What is more controversial is the assertion that correspondence training works in a similar way for low functioning students. The conclusion advanced here is that correspondence training results in students with learning disabilities becoming more aware of the influence of their cognition on the outcomes of their behaviour thus developing greater metacognitive awareness.

This conclusion is disputed by some with strong behaviourist orientations. For example Lattal and Doepke (2001) demonstrate that a homologue of correspondence training can be set up for a pigeon by rewarding the pigeon for matching their initial choice of colour in the next keypeck. This result they claim does not require a cognitive mediation explanation, but rather they suggest that correspondence training is just another example of conditional stimulus control of an operant by a compound stimulus. However, others studying animal behaviour strongly support the notion of metacognition as being involved in animal cognition and behaviour. Smith, D.J., Shields, W.E. and Washburn, D.A. (2003) in seminal research have shown that when there is the opportunity to signal uncertainty about a perceptual judgement by pressing key, monkeys and dolphins will take that option rather than making a costly mistake. Thus in effect, the suggestion is that other species “know when they know and also know that they don’t know”.

This paper has outlined some of the research associated with two valuable approaches which practitioners can use. Cognitive cuing or cognitive credit cards are easy to develop and address metacognitive deficits that many learners with disabilities may have. For students with more profound cognitive or language deficits, correspondence training can be used to establishing verbal or symbolic mediation of behaviour. I have suggested that the success of correspondence training is partly because it lends itself to the development of the student’s metacognitive skills, especially the skill of self-monitoring.

As practitioners seeking generalisation across time and settings, it is not just change in behaviour which we seek, but also a change in how the student we are helping initiates and maintains that behaviour. It should be regarded as a right for every student with a disability to develop their metacognitive awareness around all functions in their academic and social lives. Cognitive cue cards and correspondence training are two important interventions for realising that end.

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AUTHOR PROFILE

Dr Garth Ritchie is a psychologist working with Group Special Education, Hamilton. He owes much to his eleven-year-old son for his involvement in Special Education as it was through him that he developed a commitment to inclusive education. Previously he was a lecturer at the University of Waikato.

Dr Garth Ritchie



APPENDIX I: A SCHEMA UNDERLYING A COGNITIVE CREDIT CARD FOR WRITING A STORY

The table below illustrates the schema underlying a series of Cognitive Credit Card cues.

(The capitalised text could be included on the card.)

SAY (SELF-INSTRUCTION)	ASK (SELF-QUESTION)	CHECK (SELF-MONITOR)
What do I need to get started? "I NEED PEN AND PAPER" "I NEED TO FIND THE MAIN TOPIC IN THE STORY. SOMETHING THAT I REALLY WANT TO WRITE ABOUT."	How will I know if I have remembered the step? HAVE I WRITTEN A NAME THAT I COULD USE FOR MY STORY?	Check that my thinking is working: IS IT A COOL NAME THAT HELPS ME WRITE?
What is the next step? "I BRAINSTORM SOME OF THE WORDS IDEAS WHICH WILL BE IN THE STORY BY DRAWING A MIND MAP."	How will I know if I have remembered the step? HAVE I IDEAS AND WORDS FOR THE STORY IN THE MINDMAP?	Check that my thinking is working: CAN I SEE SOME GOOD IDEAS FOR THE STORY IN MY MINDMAP?
What is the next step? "I TALK TO MYSELF TO CONNECT SOME OF THE WORDS IN THE MIND MAP."	How will I know if I have remembered the step? HAVE I TALKED TO MYSELF AND CONNECTED SOME OF THE WORDS IN THE MIND MAP?	Check that my thinking is working: ARE THERE LINKS BETWEEN THE MINDMAP WORDS IN MY TALK?
What is the next step? "I SAY A SENTENCE WHICH HAS SOME OF THE WORDS IN IT."	How will I know if I have remembered the step? HAVE I SPOKEN A SENTENCE THAT CAN BE IN MY STORY?	Check that my thinking is working: IS WHAT I SAID IS LIKE WHAT IS COULD BE IN A STORY?
What is the next step? "I WRITE DOWN THE SENTENCE THAT I HAVE TALKED ABOUT."	How will I know if I have remembered the step? HAVE I WRITTEN A SENTENCE ON WHAT I WAS TALKING ABOUT?	Check that my thinking is working: DOES MY SENTENCE MAKES SENSE TO ME (AND MY FRIENDS)?
Repeat previous two steps.	Repeat previous two steps.	Check that my thinking is working: Repeat previous two steps. Then: ARE MOST WORDS IN MY SENTENCES?
What is the next step? "REARRANGE THE SENTENCES INTO A STORY ORDER."	How will I know if I am remembering the step? HAVE I REARRANGED THE SENTENCES IN MY STORY FROM FIRST TO LAST?	Check that my thinking is working: CAN I TELL WHEN SOMETHING IN MY STORY HAPPENED FROM THE ORDER OF MY SENTENCES?
What is the next step? "CHECK THE SPELLING OF MY WORDS"	How will I know if I am remembering the step? HAVE I FOUND AND CORRECTED THE WORDS WHICH ARE NOT THE SAME AS IN MY DICTIONARY?	Check that my thinking is working: ARE ALL THE WORDS THE SAME AS IN MY SPELLING DICTIONARY?
What is the next step? PUBLISH MY STORY?	How will I know if I am remembering the step? HAVE I PUT MY STORY INTO A DOCUMENT FILE?	Check that my thinking is working: CAN I PRINT OUT A COPY OF MY STORY?

APPENDIX II: A SCHEMA UNDERLYING A CORRESPONDENCE CUE CARDS TO PUT ON SHOES.

The table below illustrates the schema underlying a series of correspondence training steps.

(The pictures could be those in the first column.)

CUE CARD (SELF-INSTRUCTION)	DO (PROCESS)	REPORTING CONDITION (SELF-MONITOR)
What do I need to get started? SHOES PICTURE.	Procedure: GET SHOES. <i>Demonstrate procedure by modelling.</i>	Check that thinking is working: REPORT IF THERE ARE SHOES LIKE THE CUE <i>(like the picture)?</i>
If correspondence and signal, turn over cue card (plus reinforce).		
What is the next step? PICKING UP A SHOE PICTURE.	Procedure: PICK UP A SHOE. <i>Demonstrate procedure by modelling.</i>	Check that my thinking is working: REPORT IF I HAVE A SHOE IN MY HAND <i>(like the picture)?</i>
If correspondence and signal, turn over cue card (plus reinforce).		
What is the next step? SHOE ON A FOOT PICTURE.	Procedure: FOOT IN SHOE <i>Demonstrate procedure by modelling.</i>	Check that my thinking is working: REPORT IF I PUSHED MY FOOT INTO THE SHOE <i>(like the picture)?</i>
If correspondence and signal, turn over cue card (plus reinforce).		
What is the next step? THE VELCRO STRAP IN HAND PICTURE.	Procedure: HOLD STRAP <i>Demonstrate procedure by modelling.</i>	Check that my thinking is working: REPORT IF I AM TOUCHING THE STRAP <i>(like the picture)?</i>
If correspondence and signal, turn over cue card (plus reinforce).		
What is the next step? CONTACTED VELCRO PICTURE	Procedure: CONNECT STRAP <i>Demonstrate procedure by modelling.</i>	Check that my thinking is working: REPORT IF I CAN LET GO THE STRAP <i>(like the picture)?</i>

The national Reading Recovery data as a possible indicator of reading progress for six-year-olds in New Zealand:

Some issues

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ABSTRACT

Apart from the annual returns to the Ministry of Education of Reading Recovery (RR) data (and to a lesser extent, the four-yearly National Education Monitoring Project cycle data), there is currently no national data sets of reading achievement information for New Zealand primary school children. This article uses the national RR data for 2002 as a basis for estimating the likely full extent to which 6-year-olds may be underachieving in reading after one year of instruction. For the purposes of this article, 'average or above' achievement in reading after one year at school is defined as being able to read at or above book level 12 and being able to correctly read 20 or more words from the Burt Word reading test. To gain a wider perspective of reading performance at age six years, the six-year net data from three large urban schools for the years 2000 to 2004 was also analysed. The results show that although some researchers suggest that only two percent of children require extra reading tuition following RR, this figure is probably not a true indicator of the extent of early reading problems.

Research paper

KEYWORDS:

Reading Recovery, reading achievement, reading disabilities, data collection.

INTRODUCTION

Progress through the early reading stages in New Zealand primary schools has for many years been represented by 'book levels'. Following the introduction of the Ready to Read series of books, these levels have also been represented by colours on a 'colour wheel'. The colour wheel is divided into nine colours and each colour band equates to reading level bands, from the emergent, pre-reading level to the equivalent of a reading age of 7.5 to 8 years. While there may be many different ways to represent early reading progress, McNaughton, Phillips and MacDonald (2000) note that 'reading level is the most significant of the criteria that could be employed for judging early progress within the channel afforded by the curriculum' (p. 50). Their reason being that the specifications of the curriculum value reading so highly and that 'text levels more than any other measures of progress or achievement reflect the co-construction of development' (p. 50). Teachers also use text level placements as a basis of promotion in their general class reading programmes and for reporting general reading progress to parents and caregivers.

In relation to reading ability, what is the current accepted norm for 'average' reading progress for a child who has been at school for one year? In a recently published reading text, the Ministry of Education (2003) gives a 'ball-park' indication when it states that 'There is a widely held expectation among teachers that children at the end of year 1 will be reading at (or beyond) Blue to Green levels on the Ready to Read colour wheel' (p. 71). The Blue to Green levels equate with book levels nine to 14 which in turn, equate with a reading age of approximately six years. Using the Blue/Green levels as a barometer for average progress, many schools use a book level per month as a basic performance indicator for average reading progress over the first year. Following this barometer, these schools would normally expect children to reach at least level 12 by the end of their first year of reading instruction. Indeed, Anand and Bennie (2004) note that the majority of children who were enrolled in RR in 2002 were reading at or below book level five on entry to the programme.

This article uses the 2002 national RR data (Anand & Bennie, 2004) as a basis for estimating the number and percentage of all children who may be failing to develop satisfactory reading progress after one year of school. This is used because it is currently the only set of data that gives a nationwide picture of reading ability for a particular cohort of children, in this case, six-year-olds. The RR data is only concerned with RR enrolment information so this article also attempts to show how many other six-year-olds may also be showing limited progress in reading after one year at school.

THE 2002 RR DATA

Table 1 shows the percentage of schools that offered RR programmes in 2002 and the percentage of all six-year-old children who were taking part in the programmes during that year.

TABLE 1

RR participants in 2002 (including 'carried-over' pupils from 2001) as a function of the total six-year-old population

Total six-year-old Population	Total in RR Programmes	Percentage of all six-year-olds	Percentage of Schools with RR Programmes
55,200	11,565	21%	67.8%

TABLE 2

RR participant data plus estimated numbers of additional at-risk six-year-old readers (from 'non-RR' schools) for 2002

Total six-year-old population	Total in RR	Percent of Schools without RR	Estimated 'missing' children at-risk	New estimated at-risk total	New estimated at-risk percentage
55,200	11,565	32.2%	5,781	17,343	31.4%

TABLE 3

Frequency and percent (by gender and school) of below average Burt Words and book reading levels for six-year net results for three urban schools 2000-2004

	Below Level 12		Below 20 Burt Words		Combined Less Than Book Level 12 & 20 Burt Words	
	Total	Percent	Total	Percent	Total	Percent
School A						
Boys (n=85)	40	47%	38	44%	35	41%
Girls (n=95)	24	25%	22	23%	20	21%
School B						
Boys (n=87)	65	74%	49	56%	47	54%
Girls (n=72)	39	54%	33	45%	32	44%
School C						
Boys (n= 59)	43	72%	38	64%	38	64%
Girls (n= 55)	30	54%	23	41%	23	41%

TABLE 4

Totals for below average readers (Burt Words and book levels) by gender for all schools combined

	Below Level 12		Below 20 Burt Words		Combined Less Than Book Level 12 & 20 Burt Words	
	Total	Percent	Total	Percent	Total	Percent
School A						
Boys (n=231)	148	64%	125	54%	120	51%
Girls (n=222)	93	41%	78	35%	75	33%

When 'carried over' pupils from 2001 are included, the data show that there were 11,565 pupils who were taking part in RR programmes in 2002. This total represents 21 percent of the total six-year-old population in New Zealand. Table 1 also shows that RR was available in 67 percent of all schools suggesting that there is still a significant group of children with early reading problems who are not accounted for in RR statistics. The data in Table 2 offers a likely estimate of the remaining six-year-old population who are not accounted for in the RR statistics but who may still have significant early reading problems.

In 2002, the 67 percent of schools who did have RR attracted 11,565 participants in this programme, the new enrolments plus those carried over. This represented 21 percent of the total six-year-old population for that year. However, the data in Table 2 suggest that the 32 percent of schools in 2002 who did not have access to RR would most likely also have an additional 5,781 children who would have required extra reading assistance in a RR programme had such a programme been available. This new figure is gained by assuming that because 11,565 enrolments were generated from only two thirds of the potential schools, the remaining one third of schools should, in all probability, also generate the remaining one third of the total, which is 5,781. Based on these figures it could therefore be assumed that had RR been

available across all schools in 2002, the new total of at-risk six-year-old children requiring the extra reading instruction would have been approximately 17,343. This new total represents at least 31 percent of the total six-year-old population in that year.

Remembering that this new estimated total of low-achieving six-year-old children is based only on the 2002 RR data, even this does not necessarily present the full extent of the probable reading disability figures. When RR is available in a particular school, it doesn't necessarily follow that all needy children are 'picked up' in this programme. This is because in most cases a RR teacher is funded to only take a maximum of four children at any one time. This often means that in larger schools, there are frequently other low-achieving readers who may require extra tuition but are unable to access it because of a lack of available places. An investigation of school-wide six-year net results allows a more accurate insight into the true extent of the reading status of children at age six.

SIX-YEAR NET DATA FROM THREE SCHOOLS

In order to investigate the reading status of all children at age six, the six-year net results from three urban schools were analysed. RR programmes were also operating in all three schools at the time of the investigation and the data

reported in Tables 3 and 4 covers 2000 to 2004. While the full six-year net results were available for this analysis, the data discussed here relates only to the book reading levels and the Burt Word scores. The reason for the book level and Burt Word scores' focus is that these two measures more closely represent 'general reading ability' than most of the remaining six-year net measures. The Burt Word test is also a nationally "normed" test and therefore gives more credibility to the general reading ability measure than a book reading level would measure by itself. The results are also analysed by gender.

For this article, a book level score of 12 and a Burt Word score of 20 are used as the expected norm scores for reading achievement after one year of instruction. The data in Tables 3 and 4 present the results from the three schools.

Using book reading level 12 and a Burt Word score of 20 as the expected average scores, the data in Table 3 give some indication of the numbers of children experiencing reading difficulties after one year of instruction in each of the schools. There appears to be a general tendency for more boys than girls to have below average reading scores at age six. There also appears to be lower numbers of both boys and girls achieving below average reading scores in School A compared to the other two schools. In Schools B and C, more than 70 percent of all six-year-old boys were reading below book level 12, whereas only 47 percent of the boys in School A were reading below that level. Similarly, the Burt Word score results also reflected both a gender and school difference. Sixty-four percent of the boys in School C scored below 20 on the Burt Word test compared to 44 percent of the boys in School A. When both the below 12 book reading level and below 20 Burt Word scores were combined, the results show that 64 percent of all the boys in School C and 54 percent of all the boys in School B scored below this combined threshold.

When the data from the three schools are combined and the results presented by gender, it is evident that more than half of all the boys were performing below average on all three measures after one year of school. This data are presented in Table 4.

Sixty-four percent of all the boys in the three schools were reading below book level 12 at age 6 compared with 41 percent of all girls. Fifty four percent of the boys scored below 20 in the Burt Word test compared with 35 percent of the girls. Finally, when the below 12 book level/below 20 Burt Word' measures are combined, 51 percent of all the boys were still performing below the average, compared with 33 percent of the girls.

These results compare closely with those found in a similar study by Hobbs (2001), in which she reported that the mean Burt Word score for her six-year net data for boys was only 16.5. Given that a score of 20 represents average for a six-year-old, it would be expected that more than half of Hobbs' boys were performing below this level. Similarly the girls' mean Burt Word score in the Hobbs study was also below 20 at 19.7.

CONCLUSION

While individual schools collect their own literacy data using various measures, including the six-year net survey data, there is no national data base record for this information. The annual RR data, which is collected from only RR enrolments using the six-year net survey measures, may be used as an approximate indicator of national reading achievement. The annual RR data for 2002 show that 11,565 children were enrolled in this programme and that this figure represented 21 percent of all six-year-olds. However, given that only 60 to 70 percent of all schools have a RR programme operating in any one year the national figure for all children who are showing low progress in reading after one year at school is likely to be considerably higher than 21 percent. There are two main reasons for this:

1. Not all schools have a RR programme. Because the annual RR data is collected only from active RR teachers (and teachers in training), there are still over 30 percent of schools who don't have RR teachers or programmes. Many children in these non-RR schools are failing to make adequate progress after one year at school, and because they are not enrolled in a RR programme, their statistics are not recorded anywhere beyond the school.
2. Not all children are able to access a RR programme even if one is operating in their school. A RR teacher is generally only funded to take a maximum of four children at any one time so there are children who do not access the programme because there is no vacancy at the time. Again, these numbers are not recorded on any national data base.

Using reading book level 12 and a Burt Word score of less than 20 as proxy measures for assessing 'average' reading performance after one year at school, the six-year net data for the period 2000 to 2004 was collected and analysed from three large urban schools. The investigation showed that over 50 percent of all the boys in the three schools and over 30 percent of all girls were performing below the benchmark scores on both measures at six years. In summary, although between 16-21 percent of all six-year-old children require RR, the data suggest that this figure does not present an accurate account of the total numbers requiring extra reading assistance. If the data from the three urban schools is transferred on a national base, the total number of children requiring extra reading assistance after one year of school is likely to be in the vicinity of 30 percent for girls and up to 50 percent for boys.

While the purpose of this article was not to discuss the effectiveness or otherwise of the RR programme, it is interesting to note that Phillips and Smith (1997) state that, after completing a RR intervention, 'there remains a small percentage of children – less than 2 percent, or approximately 1000 each year, who are identified as needing more help than the two prongs can offer' (p. 3). The two 'prongs' being the regular class programme of instruction and RR. The authors base their 2 percent figure only on the number of children who do not succeed in a RR programme. The figure does not take into account the children who do not enter a RR programme in the first place.

The results from the six-year net data in the three urban schools and the estimated new totals of potential reading failures from the 'non-RR' schools suggests that the numbers of six-year-olds with reading difficulties may be as high as 50 percent.

It is not suggested here that this figure of 50 percent is common for all schools or that it remains at this level throughout the entire schooling system. Many of these six-year-olds who fail in the six-year net may well catch up to their classmates in future years. However, there are still likely to be significant numbers who may continue to have ongoing reading problems if no suitable interventions are given. While nationally, the number of six-year-olds who are failing to make satisfactory reading progress after one year at school may not be as high as 50 percent, it is still likely that substantial numbers will need extra assistance in Year one. Unfortunately, the national RR data that is collected annually by the Ministry of Education, and is currently the only substantial data base on literacy levels for six-year-olds, may mask this issue.

A second major finding from this investigation relates to the significantly higher numbers of boys who were shown to be performing below average in book reading level and Burt Word test scores after one year at school compared to the girls. Some international research evidence claims that there is little or no gender differences in reading ability (Prior, Sanson, Smart & Oberklaid, 1995; Shaywitz, Shaywitz, Fletcher & Escobar, 1990). Many of these researchers suggest that the main reason why more boys than girls are often identified by teachers and/or clinicians with reading disabilities is due merely to a selection bias. It is often claimed that this selection bias is attributed more to the type of assessment used to identify reading disabilities than to specific reading disability evidence. Catts and Kamhi (2005) claim for example that 'if a low score on a reading achievement test (and/or a discrepancy between reading and IQ) is used as the primary criterion to identify a reading disability, then one should expect to find about as many girls with reading disabilities as boys' (p. 57). The current study used two measures of reading achievement (book reading level and Burt Word test scores) and yet the data clearly indicate that more boys than girls were under-achieving after one year at school. In this case, it appears that the higher numbers of boys enrolled in reading intervention programmes, including RR, may be justified.

Finally, if we are serious about closing the literacy performance 'gap' between the good and poor readers, a stronger effort may be needed from the Ministry of Education to design assessments that more effectively identify the failing readers well before their sixth birthday. Maybe a five-year net assessment needs to be introduced because there seems to be little educational sense in attempting to identify reading problems 12 months 'down the track'. However, such a five-year net would almost certainly need to include different assessments from those currently used.

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AUTHOR PROFILE

Dr Keith Greaney is a senior lecturer in the Department of Learning and Teaching at Massey University College of Education. Before coming to Massey, Keith was a primary school teacher for 28 years, including two years as a special class teacher and 12 years as a resource teacher reading. He is also a trained Reading Recovery teacher. Keith teaches a paper in the post graduate Diploma in Literacy Education course and assists with the supervision of students undertaking Masterate research in literacy-related areas.

Dr Keith Greaney



Articulation research 2004:

Summary of Results

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ABSTRACT

Most junior syndicate teachers have concerns about the speech clarity of some of the children in their class. It is difficult for teachers to know whether to refer such students for speech assessments by their speech-language therapist. This article outlines a project which gathered New Zealand normative data for a test of articulation. A summary of the results of the project are presented in a chart which junior school teachers may find useful to help them in this decision.

Research paper

KEYWORDS:

Articulation (speech), assessment tools, data collection, New Zealand, norms (test), speech and hearing measures.

PROJECT BRIEF

The aim of this project was to gather New Zealand norms for children aged five to eight for the New Zealand Articulation Test (NZAT), which assesses speech sounds in single words. This is the first time since the 1980s that such data has been gathered. Across the country, 1,013 children were tested by 56 speech-language therapists at 53 schools. The sample was balanced to proportionally represent the whole country by geographic region, population density, ethnicity, gender and decile. Children were randomly selected. Children who were funded under the Ongoing Reviewable Resourcing Scheme, had a hearing impairment or cleft palate, or were beginning speakers of English as a second language were not included in the normative sample. The New Zealand Council for Educational Research completed the collation of the data, which was gathered and analysed in 2004.

NZAT NORMING RESULTS CHARTS

The results are summarised in the charts in Appendices one and two to show which speech sounds children are still developing in the junior school years. The results are shown as bands of percentages for the number of children saying that sound correctly in the test. Ages where 50 percent, 90 percent and 95 percent of children were achieving the sounds are shown by the shaded sections on the bar graph. The sounds were all assessed in at least two of three positions in words – at the start, middle and/or end of words. These results were averaged to find a total percentage of children who said the sound correctly across positions. A 90 percent criterion is generally used by therapists as a guideline for when children should have developed sounds. Note that any percentage chosen as the cut-off is somewhat arbitrary. To indicate how long it takes for the next five

percent of children to acquire the sound, the 95 percent cut-off is also shown. Some sounds, such as 's' and 'r' blends, have a long tail of children who take one to two years longer than the majority to develop these sounds. Other sounds, especially the blends 's' and 'th', did not reach the 100 percent criterion even at eight years, the oldest age tested.

SUMMARY OF RESULTS

The majority of children begin school at the age of five with adult speech sound patterns. A minority of children are still developing some sounds, the 'ch', 'l', 's', 'z', 'r' and 'th' blends, usually referred to as 'later developing sounds'. As expected, there was a clear pattern of older children achieving higher scores on the test than younger children, but significant gender differences were found at ages five to six but not at seven to eight. This indicates that, in general, girls learn to articulate sounds more quickly than boys. Significant differences were also found by decile and ethnicity, with children from lower decile schools and Polynesian children scoring significantly lower in the total test score than other children, particularly at younger ages. This may be due to a higher incidence of middle ear infections in Polynesian populations (Cook, Kirk, Bidwell, Hider, Weir and Tolan, 1998), which can have a detrimental impact on speech sound development (Chalmers, Stewart, Silva and Mulvena, 1989; Shriberg, Friel-Patti, Flipsen and Brown, 2000). Population density and geographic region had no discernable effect on articulation proficiency.

COMPARISON WITH PREVIOUSLY USED DATA

The results were similar to other studies of articulation which have traditionally been used as norms in New Zealand, the most common one is Sander's 1972 summary of Wellman, Case, Mengert and Bradbury (1931) and Templin's (1957) American studies. However, there were significant differences between the previously used norms and the NZAT results. Many of the ages at which 90 percent of children were achieving the sounds are lower than the previously used norms, in particular 't', 'ng', 'l', 'ch', 'sh', 's', 'z', 'j' and 'v', which reached 90 percent criterion between six months to two years earlier than indicated on Sander's chart.

'Th' sounds were the only ones found to develop later, with 19 percent of New Zealand children still developing 'th' at age 8. Other international normative studies have shown this sound to have developed in 90 percent of children by age eight (Goldman and Fristoe, 2000; Sander, 1972). This is the only sound to be developed more slowly in the NZAT results

than in other articulation development studies, and the discrepancy is wide, at 19 percent, which may indicate a dialectal effect rather than purely developmental processes. The substitution of 'f' for 'th' may be accepted by a wider group of New Zealand society, especially among people of non-European ethnic backgrounds, non-English speaking backgrounds and lower socio-economic classes.

'S' showed an interesting pattern of development for the girls' sample. Girls arrived at school with 96 percent mastery of 's', this dropped to 88 percent at ages five and a half, then increased to 97 percent again at the six year level. The blend 'dr' showed a similar pattern of reversal in the NZAT research, also only in the girl's sample. Other researchers have noted apparent reversal patterns in mastery, particularly for 's', but at different ages (Goldman and Fristoe, 2000; Kenney and Prather 1986; Poole, 1934; Prather, Hedrick and Kern 1975; Sax 1972; Templin, 1957). Various explanations have been put forward for this. Some children, who acquired an acceptable 's' early on, may then adopt an error pattern for a time before reverting back (Smit, Freilinger, Bernthal, Hand and Bird., 1990). A possible causal factor here may be the period of time between the loss of the deciduous teeth and the adult teeth coming through. Kenney and Prather (1986) suggested that reversals affecting 's' may be because examiners unconsciously tolerate greater deviations in the younger children. If this was true, the NZAT examiners must have only had higher standards for the girls at older ages, as the reversal trend was seen in the girls' sample, but not the boys', although each examiner tested both genders in equal proportions. Another possible cause for this reversal is sample error or random fluctuation, while 's' is the most commonly affected phoneme, this trend has also been reported on other sounds (Smit et al, 1990). This is an area for further investigation and highlights the need to consider all percentages for possible sampling error or random fluctuations.

IMPLICATIONS FOR SCHOOLS

Teachers are advised to replace their old data/charts on speech development with these local up to date norms. Teachers should also be aware that research indicates that boys, more so than girls, children from Pasifika nations and children from lower socio-economic backgrounds may develop sounds a little slower. The expectation is that most will have 'caught up' by age eight. When deciding on whether to refer a child for a speech assessment, teachers should take note of the sounds the child is having difficulty with and check when they develop on the chart.

If children are having difficulty making themselves understood and have a high number of sounds which are not developed by the 90-95 percent criterion for their age, referral to Group Special Education (GSE) for an assessment would be appropriate. The speech-language therapist would assess whether the child has a speech disorder and if they would benefit from speech-language therapy services.

The GSE speech-language therapy initiative is funded to provide therapy for the one percent of the population with

the highest communication needs. Other avenues of speech help are private speech-language therapists and speech teachers. There are also ways teachers can assist children with their sounds through the curriculum – teachers can contact a speech-language therapist at their local GSE office for ideas.

ACKNOWLEDGEMENT

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AUTHOR PROFILE

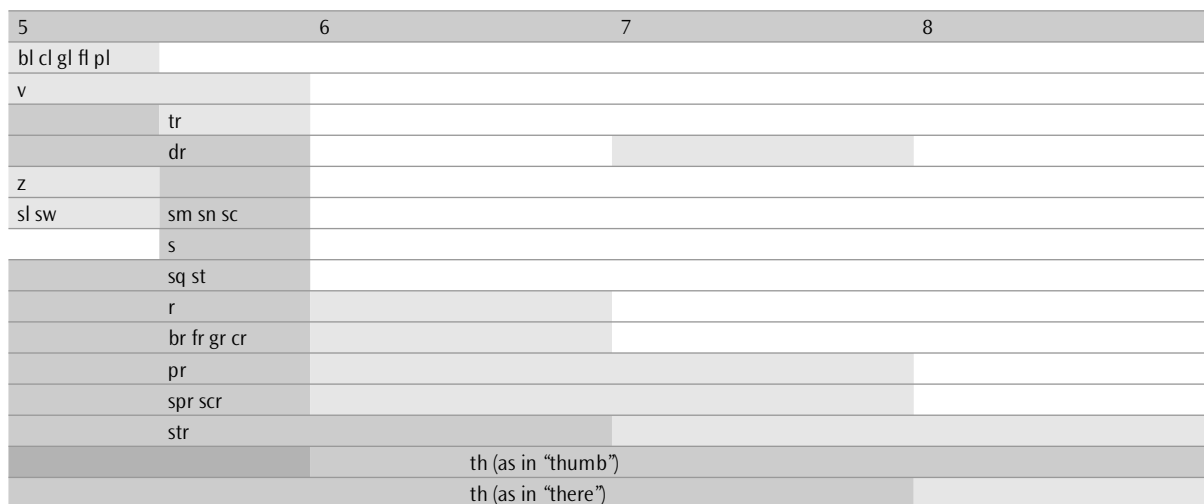
Jayne Moyle graduated from the University of Canterbury with a Bachelor of Speech and Language Therapy with first class honours in 1999. She started her career at Invercargill Specialist Education Services working with children with communication disorders in the Early Intervention, Communication and Inclusive Services teams. In 2002, she transferred to Lower Hutt Group Special Education and joined the School Focus team. She currently works in the mainstream setting with children who have severe communication needs.

Jayne Moyle



APPENDIX 1

New Zealand Articulation Test Norms Chart – Females



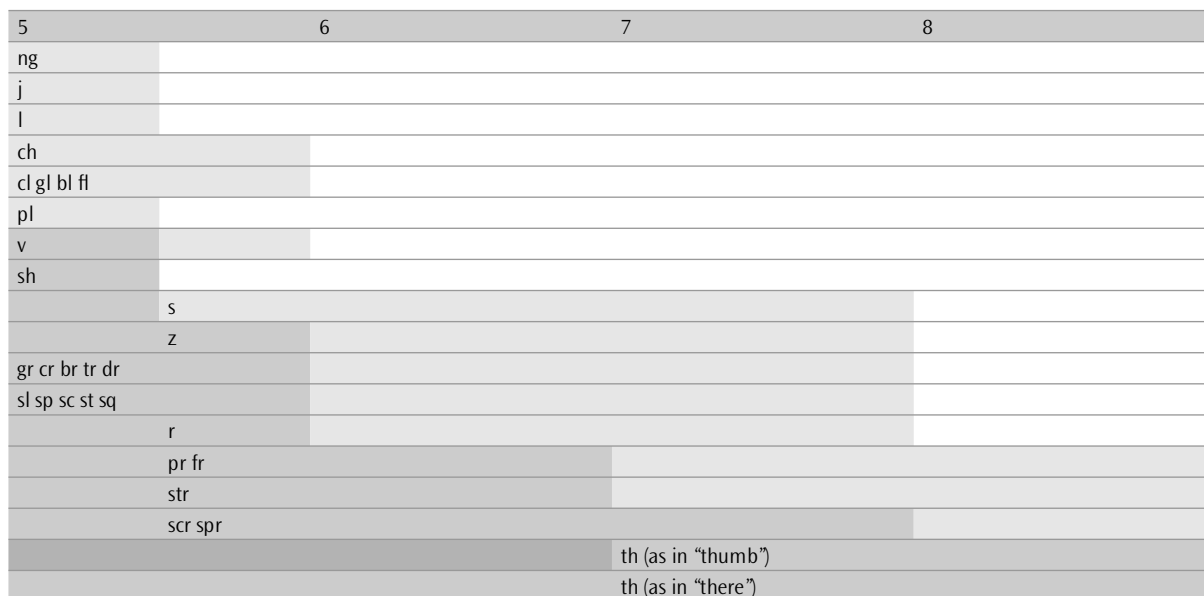
Sounds reaching 95% criterion before 5 years old: **p b t d k g f m n l h w y ng sh ch j**

KEY:

	Age range where the average of correct reponses over the word positions tested is less than 50%.
	Age range where the average of correct reponses over the word positions tested is between 50% and 90%.
	Age range where the average of correct reponses over the word positions tested is between 90% and 95%.
	Age range where the average of correct reponses over the word positions tested is greater than 95%.

APPENDIX 2

New Zealand Articulation Test Norms Chart – Males



Sounds reaching 95% criterion before 5 years old: **p b t d k g f m n h w y**

KEY:

	Age range where the average of correct reponses over the word positions tested is less than 50%.
	Age range where the average of correct reponses over the word positions tested is between 50% and 90%.
	Age range where the average of correct reponses over the word positions tested is between 90% and 95%.
	Age range where the average of correct reponses over the word positions tested is greater than 95%.

Supervision:

Using the evidence to support our practice

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ABSTRACT

The function of supervision is to make people safe, quality practitioners. They feel able to do the job to the best of their ability and to give their clients the maximum service they can within a cost effective system and the confines of their service delivery. (Ormond, 2004)

Supervision is an activity that, when effective, contributes significantly to service delivery and the ongoing learning and development of staff. Conversely, an organisation dedicating considerable time to an activity that is not benefiting practitioners and clients actually detracts from direct service provision. A national supervision project was commenced in October 2004 to maximise the effectiveness of supervision in the Ministry of Education – Special Education (GSE). One of the goals of this project was to develop a national supervision framework outlining the key indicators of effective supervision.

A reference group was formed of thirteen staff spread across regions, tiers of the organisation, occupational groups and cultural perspectives, as well as extent of experience with GSE and with supervision. The group took an evidence-based approach to the project, with the term “supervision” encompassing professional, clinical and cultural supervision. This evidence-based approach was conceptualised as the intersection between the research evidence, practitioner expertise and the lived experiences of the people involved. Therefore, information was gathered from three main sources: a literature review (the research evidence), interviews with twelve luminaries in the field of supervision (practitioner expertise) and an internal online survey (the lived experience of the people involved). Additionally, reference group members scoped existing supervision practices in their districts and regions.

The online survey, which had a response rate of nearly 40 percent, gathered a variety of quantitative and qualitative information on the current practices of staff in relation to supervision. Results from the survey, enhanced with information from districts, were used to develop a snapshot of supervision within the organisation. This snapshot was examined against the effective practices outlined by the literature and key luminaries, and informed the development of GSE’s national supervision framework.

This article seeks to synthesise the evidence underpinning each of the key themes, examine them against the current picture of supervision with GSE and translate them into practical ways of enriching supervision practices.

Supervision helps a person reach their highest potential in their work and personal life. (Ormond, 2004)

Research paper

KEYWORDS:

Supervision, organisational climate, reflection.

Five key themes emerged across the evidence on supervision, highlighting the importance of fostering an organisational climate of supervision, contextualised approaches to supervision, supporting self-regulated learning, strong relationships and an outcomes focus.

1. DEVELOPING A CLIMATE OF SUPERVISION THROUGHOUT THE ORGANISATION

A burgeoning climate of supervision exists already in GSE, primarily with practitioners. How can this climate be expanded to include all GSE staff, including management, administration and support staff?

Approximately half of the psychologists, special education advisors, speech-language therapists and occupational therapists responded to the internal survey on supervision. Eighty percent of the respondents report that they receive supervision; almost half of the respondents (46 percent) supervise others, in most cases (66 percent) they supervise one to two people. Examining this data by occupational group, all advisors on deaf children (ADC), as well as approximately half of the early intervention teachers, occupational therapists, psychologists and physiotherapists supervise others.

There was a limited response to the survey from managers and support staff. A significant number of the managers that responded, (75 percent of district managers, 57 percent of team leaders, 23 percent of service managers) indicated that they do not have supervision or that their supervision is with their line manager. Although the responses from administration staff were high, they illustrated varying perceptions of supervision and 33 percent had concerns or were dissatisfied with their current supervision arrangements.

Individual supervision is most effective when supported by an organisational climate of supervision. Cultivating “communities of practice” around supervision provides one way of furthering this climate. Wenger (2005) defines communities of practice as groups who are bound together by shared activities, with an emphasis on collaboration and the creation and sharing of information and practice. This framework supports staff in reaching the overarching goals of supervision: professional development, personal and professional support, and maintenance of standards (Annan, 2005). While supervision practices may look different across different groups of staff, for example administration staff, growing supervision as a shared practice across the organisation would allow groups to learn from one another as well.

The Climate of Supervision Should Be Modelled From The Top

I totally and utterly believe that supervision is for every single person, from the CEO down, for everybody. That's the way you model what it's about. How can you say "You must have supervision" if managers aren't receiving it themselves? Also, until you start having supervision you don't know what it is and you don't understand the value of what it is. So, for managers who have the responsibility to ensure supervision is available and happens, they've got to value it themselves. Then everyone who is being supervised is a supervisor and so on: a ripple effect.
(Hawken, 2004)

Learning organisations are comprised of people that, individually and collectively, make changes in response to external influences, new knowledge and self-review (Senge, 1993, in Jensen, Malcolm, Phelps & Stoker, 2002). Supervision provides the context and relationships vital for reflecting upon and changing our practices, necessary at every level of the organisation. Supervision also makes practice more visible and tacit attitudes and processes more explicit, creating opportunities for open discussion and change.

In engendering a climate of supervision throughout GSE, as with any large scale initiative, thought should be given to how best to engage staff, especially those for whom supervision is not currently seen as a priority. Schiemann (1995, cited in Jensen, Malcolm, Phelps & Stokes, 2002) identifies five strategies for supporting change in organisations:

1. A climate where growth and change are expected, encouraged and modelled at all levels.
2. Sufficient planning and dialogue with those who will be impacted.
3. Adequate follow up, including continued communication and support.
4. Consensus from management around what will be done.
5. Sufficient skills of those driving the change and those expected to change, fostered through training and other support.

These strategies require modelling, consultation and careful planning from key leaders in the organisation.

A leader is someone that others follow rather than someone who directs so good role modelling within the service is needed.
(Russell, 2004)

Raising Expectations Around The Purpose And Outcomes Of Formal Supervision

Eighty-five percent of GSE respondents reported they are satisfied or very satisfied with the skill level of their supervisor. While this is a significant number and offers a positive platform on which to build, when considered alongside snapshots of supervision practice in the districts, this might indicate a need to raise people's expectations about what can be achieved through supervision. Current supervision arrangements might offer more support than challenge, or perhaps some staff have nothing with which to compare their current supervision.

Additionally, the current thrust within the Ministry for more of an outcomes focus compels individuals and the organisation as a whole to re-examine the way supervision supports outcomes for practitioners, their clients and the organisation.

Establish Clear Guidelines Around The Frequency, Regularity And Intentionality Of Supervision

Effective supervision is structured, intentional and ongoing (Hawken, 2004). Currently, supervision has an element of discretion as the frequency is largely determined by individual staff. Sixty percent of respondents receive supervision weekly or fortnightly, with an additional 23 percent getting supervision “as needed”. Eighty-two percent of respondents access cultural supervision “as needed”. This leaves a significant number of staff receiving infrequent, or no supervision. These findings signal the need for national agreement on what triggers the need for supervision, from whom, and for what purpose. We need to “formalise what already happens in an ad hoc way, by giving it a structure and making it an intentional relationship” (Hawken, 2004). Twenty percent of respondents indicated they do not receive supervision because they do not have access to an appropriate person; 21 percent say they do not have supervision because they get their needs met in other ways. This evidence concurs with Annan and Ryba's (2003) survey of 31 educational psychologists in GSE, where 91 percent reported satisfaction with their supervision arrangement, but of these 28 percent were not receiving formal supervision. Still, staff were satisfied they met the overarching supervisory goals of personal and or professional support, professional development and accountability through a range of integrated activities. These included informal supervision (100 percent), teaming (94 percent), formal supervision (81 percent), professional gatherings (65 percent), professional literature (58 percent) and self-reflection (55 percent). Many of these activities are based on professional connectedness, which is the degree to which we engage with others to support our own learning.

The GSE national supervision framework should therefore seek to validate the ranges of ways people meet the broad goals of supervision while assuming the additional need for formal supervision. Likewise, formal supervision should not be the only form of support and challenge that a person receives (Hunter and Blair, 1999).

As An Organisation Promoting Safe And Effective Supervision Practices, We Should Clarify Who Uses This Information And For What Purpose

It's really important to have worked out the feedback, the communication, what goes from the supervision session and how does it go, who's involved and where is the transparency. So, it's having very clear diagrams of the feedback loops.
(Hawken, 2004)

According to the survey data, 77 percent of respondents reported that their manager knows who their supervisor is but 16 percent were not sure. Seventy-three percent record the time they spend being supervised on their diary sheet and 60 percent record time they spend as supervisors. The amount of specific information that goes to management also varies, with some staff informing their manager only that supervision has occurred, while others provide a summary of topics and any follow-up actions.

Consistently used reporting mechanisms are crucial for measuring the effectiveness of supervision. For instance, because both partners benefit from supervision, one slot on diary sheets could be used for time spent in supervision. This would allow for national data collection. Managers should ensure that their team members have appropriate supervision arrangements detailed by negotiated supervision agreements. Managers should be informed that supervision has occurred, while the supervision partners keep a record of the content of sessions. Six-monthly supervision updates, jointly written by the supervision partners, can also be used to update management on progress towards supervision goals while maintaining the confidentiality of the supervision relationship (Hawken, 2004).

The supervision agreement should outline when confidentiality is broken, how and to whom. For instance, if concerns have not been resolved in the supervision relationship, one person must inform the other that the concern will be taken outside the relationship. Ideally, the supervision partners would then go together to this person, who has already been identified in their supervision agreement.

2. CONTEXTUALISED APPROACH

With anyone who comes to supervision, we should seek to understand who they are and where they are from, their background, what's important to them, their values, what is a strength for them and what is difficult for them within their context.
(Ormond, 2004)

Having a contextualised approach to supervision involves considering the cultural background of the person, understanding the person in their context and seeing supervision as part of the whole of learning supports for that person. Part of understanding the cultural background of Māori supervisors, for instance, requires considering their accountability back to whānau. Māori supervisors often link first to their supervision partner's whānau, hapū and iwi. They then account to their partner's clients' whānau, hapū and iwi. Third, they link to their own whānau, hapū, iwi and, fourth, to the organisation they work for. This poses potential tension for Māori staff, as often organisations believe staff's primary responsibility is to the organisation (Webber-Dreadon, 2004).

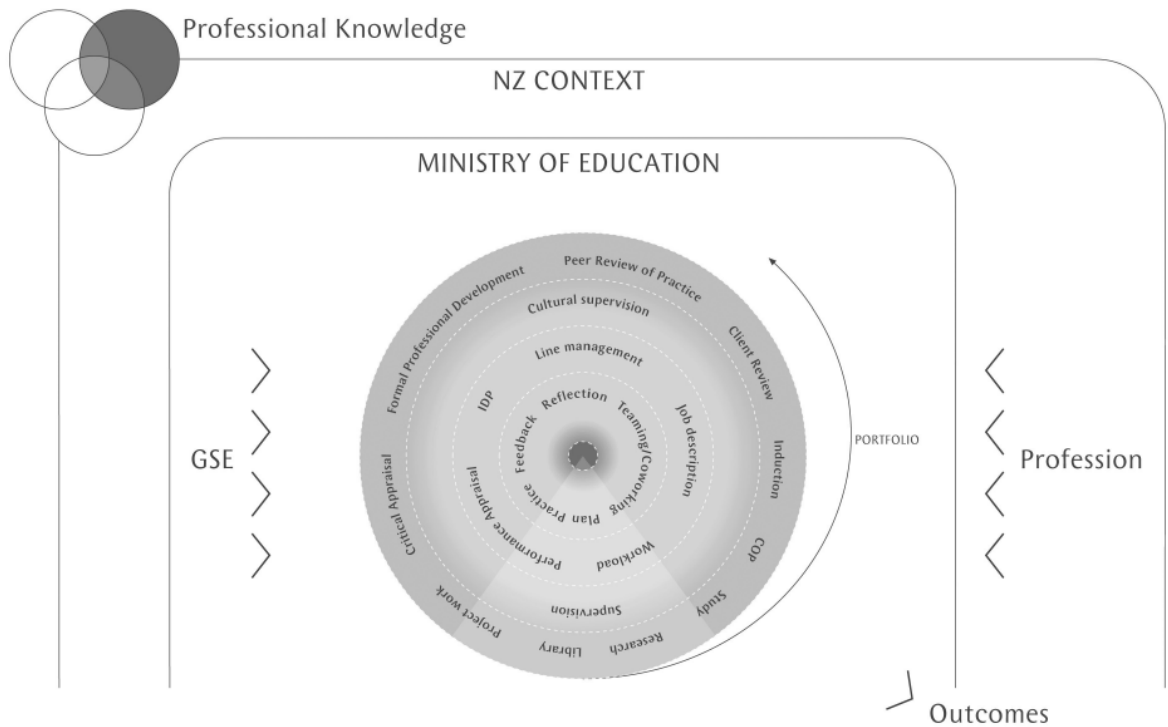
Understanding the person in their context involves viewing individuals as inseparable from the layers of their social systems (Sheridan and Gutkin, 2000). Accordingly, supervision should provide an explicit and intentional opportunity to reflect on practice and the wider variables, such as work-life balance, that may be impacting on practice. In the same way that individuals are viewed in their context, supervision should be seen as just one of the activities people engage in to support their personal and professional growth. Learning supports include other, complementary activities, such as co-working and informal supervision.

A Synchronised Approach

A synchronised approach to supporting ongoing learning should be developed, and supervision should be mapped within the range of professional learning supports available to staff. Professional learning is an individual responsibility and ultimately benefits the individual as well as the children, families, schools and early childhood centres with whom they interact. The benefits for individuals and the organisation are maximised when the approach to ongoing learning is planned and interconnected. Additionally, support and engagement from staff are increased when they can make links across national, regional and local initiatives and directly to their service delivery.

In 2004, Te Pataka GSE's data system, indicated that approximately sixty percent of GSE practitioner time is attributed to direct service delivery with the remainder spent on additional activities. Each non-direct activity, such as supervision, has the potential to contribute significantly to, or detract from, service delivery; this depends on the quality of the activity. Staff are best supported in their pursuit of ongoing learning by an integrated approach, which outlines each activity in terms of its purpose, how it can improve services (especially from the point of view of schools and families) and how it marries with other activities. This framework for supporting ongoing learning should also link daily activities to higher level strategic directions.

Professional Development and Learning in GSE



The particular supports any one practitioner will draw on can then be individualised according to the context of the work, such as the degree of visibility and risk, where people are at developmentally and their degree of connectedness to others. For instance, a seasoned practitioner working in a large, supportive team and co-working the majority of her work will have different needs to a new graduate doing high-risk work in a remote area with little peer support. The latter practitioner might engage more frequently in some organisational supports, such as the peer review of practice, client review and formal supervision.

As staff identify learning goals, assisted by the performance review cycle, they should examine the levels of professional development, support and accountability they will achieve incidentally in their interactions with others. They can then identify additional supports that are needed to support their ongoing learning, and develop measurable outcomes of their learning for themselves, their clients and the organisation.

GRID OF PROFESSIONAL CONNECTEDNESS “PERSONAL PATH”

Outcomes for the child, family, whānau – Outcomes for the practitioner – Outcomes for the organisation

	Personal/Professional Support	Professional Development	Accountability/ Maintenance of Standards
Formal supervision			
Informal supervision			
Professional learning conversations			
Co-working/Teaming			
Reading the literature			
Attending workshops			
Consultation			
Work with children and families/Whānau			
Work with schools and EC centres			

When the individual development plan is developed collaboratively, the practitioner, potential/existing supervisor and line manager gain a clear understanding of how contextual supports, such as co-working and informal supervision, contribute to the practitioner's ongoing learning and development. They also identify the explicit ways in which formal supervision can supplement the current arrangement, in terms of connectedness and ongoing learning (Annan, 2005) and how that learning will be demonstrated in terms of client outcomes (Ormond, 2004). Several key informants note the importance of taking goals determined in the performance appraisal into supervision, and the aforementioned activities provide a strength-based process for achieving this.

3. SELF-REGULATED LEARNING

Supervision is a place to produce oneself as an ethical and effective practitioner.
(Crockett, 2002)

Reflective practice is an essential component of self-regulated learning, and collective reflective practice is a key ingredient of effective supervision. Self-regulated learning involves the ability to organise and evaluate one's self and work, set goals and learning plans, and monitor ones' actions and progress toward those goals (Wilson, 1998; Zimmerman, 1990, in Lizzio and Wilson, 2002). Practitioners and managers discuss the limited time they have for systematically reflecting on their practice. Supervision safeguards this time and space, allowing them to critically examine the intended and unintended consequences of our ways of working (Russell, 2004). Supervision is also a place for reflective listening (Drysdale, 2004), supporting people to explore the practice wisdom, policies and values and beliefs that influence their decision making (Munnely, 2004). From a Māori perspective, the supervision process embodies the gift of reciprocity. Both supervision partners give, receive and share the knowledge they each have, supporting their combined search for 'best practice' (Webber-Dreadon, 2004).

Our approach to supervision, as with our work, needs to be strengths based and solution-focused. Supervision represents several developmental pathways: our journey from novice to expert as a practitioner (Brenner, 1982), with this particular organisation, with supervision, and in this particular supervision relationship (McMahon and Patton, 2002). The nature of supervision should vary for individuals, and should change over time to reflect their movement along these pathways. For instance, a new therapist may bring concrete examples from practice, leaving supervision with specific ideas on how to approach certain cases. Later, discussion might encompass more general themes across casework, such as using strengths-based approaches or working through resistance to change (Thomas, 2004).

Supervision also acknowledges the wider range of experience a person brings with them, which parallels the process with which practitioners approach their work with others (Drysdale, 2004; Munnely, 2004). Using strengths-based and solution-focused approaches to supervision models encourages us to do the same with our clients (Thomas,

2004). In both cases, it is important to understand the learner in terms of their strengths and learning styles, and to value the person through acknowledgement and respect (Ormond, 2004).

I don't necessarily subscribe to the 'clean slate' point of view; everyone comes with something that can be built on.
(Thomas, 2004)

Supervision Should Empower

The supervisor doesn't have the answers, because it's about the person being the expert in who they are and it's about drawing out from the person his or her own answers.
(Hawken, 2004)

Supervision is increasingly driven by the principles of adult learning, such as self assessment and self review, in an action reflection model (Drysdale, 2004). Practitioners set and meet their own learning goals with the support of their supervision partner and others. Individuals drive the supervision process by finding the appropriate partner, then facilitating the processes of contracting, preparing and negotiating agendas, and ongoing review. They also carry out the work in between (Hunter and Blair, 1999, Doolan, 2004). When practitioners are not happy with the supervision relationship, it is their responsibility to address that (Ormond, 2004). Individuals also have a duty to align supervision with their professional development goals and to supplement formal supervision with other supports for ongoing learning: informal supervision and consultation, co-working and teaming, attending professional gatherings, professional reading and engaging in various Communities of Practice (GSE National supervision framework, 2005).

The task of evaluation is not on the supervisor. Rather, it is the practitioner's responsibility to use supervision to help them to gain evidence of their ongoing learning and competency (Ford, 2004). The supervisor's role is largely that of initiating inquiry, highlighting examples of constructive change, and supporting practitioner growth through relevant ideas, reactions, comments and suggestions (Lowe and Guy, in McMahon and Patton, 2002).

As an organisation, our specific actions should illustrate our desire to empower the practitioner. For instance, managers should work directly with the practitioner to suggest topics which might be discussed in supervision, but never go directly to the supervision partner. Practitioners should also be supported to choose their own supervisor. The 77 percent of respondents who chose their own supervisor had significantly higher rates (90 percent compared to 77 percent) of satisfaction, highlighting the importance of choice.

Importantly, staff report that supervision is often cancelled due to the more pressing demands of service provision. Managers encourage supervision to remain a priority by supporting the workload management of team members. This includes supporting supervisors, ensuring they can still effectively supervise the number of staff they are committed to in addition to other demands on their time.

4. THE IMPORTANCE OF THE RELATIONSHIP

Irrespective of the specific approach, it is the quality of the relationship that is the most important determinant of effective supervision. Therefore, time needs to be allowed for the relationship building.

(McMahon, 2002)

There is a belief in this world, in the Māori world, that everything that occurs in the context of a relationship – it is not isolated into the behavioural; it occurs in a relationship of some sort.

(Huata, 2004)

Time should be spent on the process of establishing and maintaining an effective supervision relationship. Forty-one percent of the internal survey respondents did not know whether their supervisor had training in supervision; this might indicate variability in terms of how supervision partnerships are initiated and explored.

Prior to establishing the relationship, it is important to conduct an exploratory meeting. Individuals share initial thinking on their ongoing learning needs and goals, how they are connected to other forms of ongoing learning and how supervision might be used to meet their goals. Additionally, McMahon and Patton (2002) suggest they share previous types of supervision (what has worked and what has not), how they see the role of each supervision partner and what they seek in a supervision partner. Supervisors could have a resume prepared for the exploratory meeting, outlining approaches, expectations of both supervision partners, and what they see as their strengths as a supervisor (McMahon and Patton, 2002).

The exploratory meeting gives both parties a chance to clarify expectations with no obligation to begin a formal relationship. When two or more people decide to continue into that relationship, the next stage is developing a supervision agreement. Constructing this agreement allows supervision partners the opportunity to establish the parameters of the relationship, for example, the frequency and length of time of supervision, and the roles and responsibilities. The process for taking information to others, such as management, should also be clarified.

Agreements should initially be short-term and reviewed after six sessions, then every six months to one year (Drysdale, 2004; Munnely, 2004; Ormond, 2004). Setting and reviewing goals is paramount, as supervisory needs change over time.

You are so many different roles as a supervisor that sometimes people outgrow you; this may not be addressed and that's when frustration and lack of motivation can kick in.

(Ormond, 2004)

Additionally, a potential danger of long term peer supervision is that it may provide more support than challenge, and lack accountability (Drysdale, 2004).

A key component of effective supervision is an agenda, which is initiated by the person seeking supervision and negotiated and prioritised by all parties prior to the start of the session. Notes are taken, agreed on at the end and reviewed before

the next session; there is agreement around who is responsible for following up on the actions generated in supervision.

The relationship actually proves to be more important than the model.

(Drysdale, 2004)

Effective Supervision Acknowledges Issues Of Power Sharing And Combines Support, Challenge And Inspiration

The best form of relationship is one based on social power and not structural power. It needs to be a very safe relationship so that you bring along your biggest worries, your deepest concerns ...

Whereas, if the line manager is the supervisor, you are always protecting your back because this is the person who has the control.

(Hewson, 2004)

The majority (88 percent) of respondents have supervision with someone other than their line manager, and their rates of dissatisfaction are significantly lower (11 percent to 30 percent). To avoid potential role conflict, such as power imbalances and dual relationships, it is recommended that line managers are not also supervisors. Ideally, practitioners select their own supervisor to align with their identified goals for supervision. In the rare situations where the supervision partner remains the line manager, clarity and separation of roles is critical (GSE supervision framework, 2005).

Irrespective of levels of status in the organisation, the partners should work towards an equal relationship within supervision (Drysdale, 2004). This relationship is characterised by an effective balance of support, challenge and inspiration (McCashen, 2000). Supervision partners establish a safe environment and foster strong relationships alongside those with whom they have supervision. They thoughtfully participate in the educative and facilitative process that is supervision. Supervision partners provide support and inspiration while recognising and challenging unhelpful patterns (Russell, 2004).

You are there to facilitate growth; you are not just there to help them survive.

(Hawken, 2004)

5. OUTCOMES FOCUS

You have got people working for you for longer, you have got happy motivated workers: people who feel in control of their caseload. As they are feeling more effective, you will hopefully get less burnout and less staleness. Ultimately I would imagine that you would have a greater sense of team because people will feel valued and respected. You get effective team workers and everybody evaluating themselves in supervision. Supervision produces greater self awareness and an understanding that you can continually strive.

(Ormond, 2004)

Just as education exists to make a tangible difference to the lives of children with special needs (GSE Toolkit, 2005), supervision exists to make a tangible difference to

practitioner skills and knowledge so that they might work more effectively with colleagues, peers and clients. The current international thrust, in education and other sectors, is towards an outcomes focus. This means concentrating less on inputs, such as hours spent in supervision, and more on the results of effective supervision. In terms of learning goals, what progress have we made due to supervision? How do we know? How does that progress in turn increase our effectiveness with the children, family, schools and early childhood centres with whom we work? How can we demonstrate that increased effectiveness?

In moving to a stronger outcomes approach to supervision, key questions to consider are:

- What are the main outcomes that you are trying to achieve or contribute to in supervision?
- Why these outcomes of supervision rather than other outcomes?
- How can the outcomes be achieved through supervision?
- How will you know that the desired outcomes have been achieved?
- How will you measure these outcomes from supervision?

(Adapted from GSE Action Plan Toolkit, 2005.)

Supervision can be linked to outcomes at the individual practitioner, client and organisational level. For individuals, Lizzio and Wilson (in McMahon and Patton, 2002) identify six potential outcomes of supervision – systemic competence, role efficacy, technical skills, personal development, conceptual competence and ethical judgment – with the overarching goal of self-regulated learning. Supervision provides opportunities for shared reflection and learning in a cost-effective, authentic environment. It provides opportunities to practice new skills, including facilitation skills. Practitioners gain a better understanding of what others are doing, have access to more challenge and support, and ultimately supervision engenders team building (McCashen, 2000).

Individual outcomes often overlap with outcomes for clients and the organisation. For instance, effective supervision reduces stress and supports the maintenance of professional standards, resulting in better quality services to clients (Hunter and Blair, 1999). The responsibility of the individual, with the support of the supervisor and/or line manager, is to identify how they will meet their goals (in part through supervision) and how they will evidence that learning in the form of outcomes for themselves, the organisation and their clients (Ormond, 2004).

*We all have responsibility to be the best we can be for our clients.
(Russell, 2004)*

Ongoing Training

*I think the training is crucial because if you don't have it then what you learn is the way you were supervised and if that wasn't particularly good then you just repeat the mistakes
(Munnally, 2004)*

Ongoing training of staff leads to shared understanding, higher transfer of training into practice, and increased competency. Staff currently learn about supervision from a range of sources, contributing to a high variation in quality and approaches. Training available to all staff, focusing on their role within a learning organisation, would cultivate a shared understanding and further the climate and effectiveness of supervision. According to the survey data, current rates of dissatisfaction with supervision are highest for ADCs, a group which is required to supervise others when only half of them report receiving any training themselves.

Rates of satisfaction with supervision were significantly higher (97 compared to 71 percent) when the practitioner perceived that their supervisor was trained in supervision. Rates of satisfaction were also higher (17 percent to 12 percent) when staff themselves had been trained, indicating that training supports staff to be better consumers of supervision. Additionally, Annan and Ryba (2003) found that, when prioritising desired supervisor characteristics, practitioners first wanted expertise, followed by trust and theoretical orientation. Training, of course, does not equal competency, as competency is a combination of qualifications, ongoing learning and development and experience.

CONCLUSION

The GSE national supervision project sought to identify key indicators of effective supervision across a range of sources. Five key themes emerged across the evidence on supervision, highlighting the importance of an organisational climate of supervision, contextualised approaches supporting self-regulated learning, strong relationships and an outcomes focus. This article has sought to summarise the five themes and to make practical suggestions for how this evidence can translate into improved supervision practices.

The next step for practitioners is using this information to reflect on our own supervision relationship. Which aspects are we doing really well? Which of our actions fit with the key indicators? How can each of us further contribute to a climate of supervision in our office? Are there specific ways I can better support my own learning and my relationship with my supervision partner? Does the approach I take to supervision mirror the way I work with clients? How do I know my supervision is effective; can I demonstrate specific benefits for myself and my clients?

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Wendy Holley



Ecological and developmental issues in the practice of educational psychology

Dr Josephine Bowler
Psychologist



ABSTRACT

This conceptual article examines what is meant by the term 'ecological-contextual' in relation to the assessment of children's needs. Revisiting the discipline of ethology, the article applies the construct of niche to the human species, including examples from children's experiences to validate the relevance of this link. Issues of power imbalance in relationships are discussed in relation to the strategies children use to assume some control over the situations they find themselves in. It is suggested that without a comprehensive contextual analysis it becomes more likely that children's problematic behaviours will be interpreted in terms of medical categories. A range of theoretical perspectives linked to the reciprocity that characterises all relationships and the significance of such reciprocity to children's construction of meaning and feelings of self-efficacy is discussed. The hypothesis that attachment issues can become a disorder for the child is challenged. The use of the community genogram is introduced as a working tool for exploring children's multiple contexts. While the practice of educational psychology is the primary focus of this article, the dimensions discussed have equal relevance to all who work with children presenting problematic behaviours or developmental concerns. This article is intended to initiate further dialogue on these themes.

Research paper

KEYWORDS:

Attachment behaviour, child development, education psychology, ecological perspective, resilience.

INTRODUCTION

The terms ecological and ecological-contextual are often used but seldom defined except by reference to the nested systems model of Urie Bronfenbrenner (1979). Ecology is "the study of relationships between living organisms and their environment... the set of relationships of a particular organism with its environment" (Collins 1993, p. 407). Relationships are dynamic, involving more than one person. This implies that an assessment of any child's situation should have at least two people, and often more, as the minimum unit of study. The focus may be the parent-children dyad, the teacher-children relationship or the children in interaction with their peer group or siblings. Problematic behaviours always occur in the context of relationships.

Our sense of self, of self-efficacy, self-worth and meaning has its roots in our relationships but it is also influenced by the attributes of the current physical context in which we are embedded. As an information-processing species, we continually carry on internal dialogues with those who are significant in our world, alongside our actual verbal and physical interactions with them. Children construct meaning in internal, external, emotional, physical and social contexts, which both constrain and facilitate development.

RECIPROCITY AND POWER

When children are reared within the context of nurturing relationships the foundations are laid for developmental well-being and resilience.

Especially in its early phases, and to a great extent throughout the life course, human development takes place through processes of progressively more complex reciprocal interactions between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To promote well-being these interactions must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes. (Bronfenbrenner & Ceci, 1994, p. 572).

This construct of proximal processes fits with theoretical descriptions of how learning is socially mediated in the zone of proximal development (Vygotsky, 1978). Bronfenbrenner and Ceci's summary of research on problem behaviours in early childhood, and parental monitoring of adolescent school achievement, revealed that high levels of positive interaction contributed to effective developmental functioning (p. 572). The biological-ecological model they present suggests that when reciprocity between children and significant adults does not involve a high degree of warmth and engagement "genetically based potentials for effective psychological functioning remain relatively unrealised but ... become actualised to a progressively greater extent as proximal processes increase in magnitude" (p. 569). This is consistent with the theory of reaction range that suggests that although each person has a unique, genetically determined response to the environment, a favourable context can enhance performance, within the range of outcomes possible for that individual (Gottesman, 1963). It is also consistent with research on parenting styles that

showed an authoritative approach combining high warmth with high levels of supervision from early childhood resulted in more favourable developmental outcomes in adolescence than permissive or authoritarian approaches (Baumrind, 1975, 1991).

Reciprocity, sometimes called bi-directionality, does not necessarily involve an equal power base. Basic to an ecological methodology must be some analysis of the degree of each participants' power in a particular setting in recruiting the resources perceived as necessary to their well-being.

THE DEVELOPMENTAL NICHE

In an ecological-contextual approach to the analysis of problematic behaviour insight can be gained from ethology, the study of animals in their normal environment – a term derived from the Greek ethos, meaning “character” (Collins, 1993, p. 439). The significance of ethology to psychology has been progressively demonstrated throughout the 20th century in the experiments on imprinting by Lorenz (1966) and Tinbergen (1972); the differentiation of human bonding and attachment (Ainsworth, 1991; Ainsworth and Wittig, 1969; Bowlby, 1957 and 1969) and the elaboration of attachment theory in relation to trauma (Crittendon 1988, Main 1990). To understand the antecedents of children’s developmental well-being, it is necessary to examine the construct of niche that has the potential to provide educational psychology with an additional perspective for exploring an individual’s situation. In a child’s microsystem, as described by Bronfenbrenner, there are a series of niches occupied by each person who lives in a family or functions in other contained settings such as schools and classrooms. Niche analysis would involve examination of primary settings in greater microdetail, in the contexts of relationships.

Niche is a construct that incorporates and goes beyond the physical habitat. Ethologists, Elton (1927), Hutchinson (1965) Pianka (1983), Dennet (1983), Wallace (1987) and Archer (1992) have described properties of the niche that include competitiveness and boundary testing of the tolerance

limits of available resources. Super and Harkness (1986) investigated the relevance of niche to the study of human development and behaviour, concluding “the developmental niche provides a framework for examining the effects of cultural features of child rearing in interaction with general developmental parameters” (p. 546). From the child’s perspective these authors attempted to understand processes of development and acquisition of culture. They defined three aspects of the developmental niche – the physical and social settings in which the child lives, the culturally regulated customs of child care and child rearing, and the psychology of the caretakers.

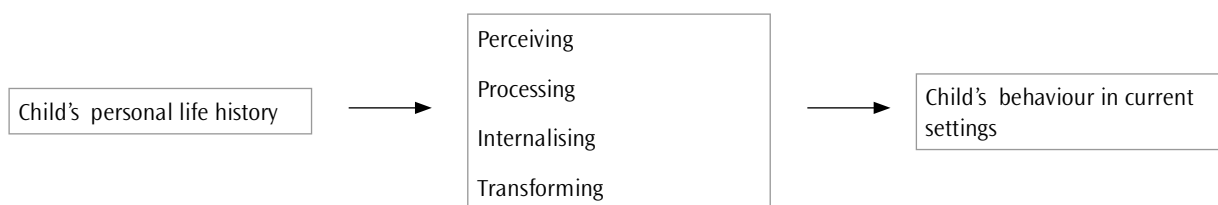
These three subsystems share the common function of mediating the individual’s developmental experience within the larger culture. Regularities in the subsystems, as well as thematic continuities from one culturally defined developmental stage to the next, provide material from which the child abstracts the social, affective and cognitive rules of the culture, as much as the rules of grammar are abstracted from the regularities of the speech environment. (Super & Harkness, 1986, p. 552)

The niche defines cultural identity and both facilitates and constrains the individual’s capacity for a sense of self-efficacy in that setting. It fits with Vygotsky’s thesis of development as a socially and culturally mediated process, and his description of the mediating role of others in this process. The niche can be envisaged as a multidimensional interactive context of conditions and systems in which he individual is an active and reciprocal element. In this, the capacity for individuals to assume agency and power is influenced.

Children continually seek to make meaning out of the situations in which they find themselves. Their behaviours are a function of this search and make sense in some way that relates to the child’s embeddedness in a particular setting, despite the fact that these behaviours may appear problematic to adults. The feedback they receive is incorporated into a growing sense of self as “bad” or “good”, “helpless” or “powerful”.

CHILD’S MICROSYSTEMS

Family, School, Sports group, Peer group, Church group



Niche opportunities for functional reciprocity. Developmental resources and emotional and behaviour responses will differ across settings.

Child	→	Custodial parent	Child	→	Friend
Child	→	Non custodial parent during access	Child	→	Playground peer group
Child	→	Sports coach	Child	→	Valued grandparent/aunt
Child	→	Classroom teacher	Child	→	Younger sibling

A visualisation of the “contexture” of a child’s experience as it might be at a particular developmental stage. The word contexture is used to indicate (a) the physical and emotional embeddedness of children within their contexts, (b) ongoing reciprocal relationships, expressed in the prefix con (meaning ‘with’) and (c) the emotional texture of the child’s experience resulting from cognitive processing. These three aspects of experience constitute the niche. Children’s capacity for developing resilience and a sense of self-efficacy resides in their ongoing construction of meaning in relation to events and relationships currently experienced.

THE ROOTS OF RESILIENCE

A recurring issue in the practice of educational psychology is the degree to which individual children are able to use the supports and guidance offered by adults within the microsystems of family, classroom, school and community settings. Those who are unable to recognise the utility value of such supports, or who lack support, may present challenging behaviours. The functions of these are hard for adults to understand but they may be to recruit nurturing, acceptance, or recognition of needs. The function of the niche is to promote survival and competition for resources is an intrinsic aspect of this. Such resources could be adult time and attention, affection, physical necessities, access to learning materials or comprehensible instruction. In families, schools and peer groups, children who can elicit and recruit the best of the available resources are likely to thrive. This involves learning the often undefined rules in play in each setting they inhabit and adapting accordingly. The capacity for such adaptive behaviour places children at an advantage in the same way that animals adapting to their habitat are at an evolutionary advantage. Functioning optimally across settings involves understanding a range of different rules and expectations. Learning about such properties of the niche is not always easy, especially for mobile and relocated children. Loss of any one or a combination of familiar and nurturing aspects of a child’s daily life may trigger anger or grief that blocks the capacity to learn this essential information. Instead energy is invested in emotion. These losses might appear to adults to be significant, such as the loss of a parent through death or separation, or less important, such as moving school or losing a pet or a cuddly toy, but the degree and intensity of the loss is known only to the child. Resilient children are those who have learned to adapt to new circumstances quickly because they enter with a sense of self efficacy, grounded in the cumulative outcomes of reciprocally positive interactions with others. Others, less favourably grounded, have difficulty in working out the new supports available and adapting. Bowler (1997) recorded the retrospective recall of adults who had been in multiple foster care settings throughout childhood. One survivor described the difficulties of trying to behave in ways that would elicit a nurturing response from strangers.

You work hard to try to fit into a new place. You watch, adapt yourself and work hard at picking up the rules, then you work hard at changing yourself to blend in (p. 188).

A recurrent theme in these narratives was the amount of energy expended by the children, firstly in learning about the properties of the new home and then in trying to produce behaviour that they hoped would elicit nurturing.

SURVIVAL STRATEGIES

In classic research on perception Gibson (1979) used the term “affordances” to describe how the niche of a particular family system offers information on opportunities to increase well-being. “What the child affords the mother is reciprocal to what the mother affords the infant” (p. 135). This construct of affordance relates to attachment. Because the “children” in Bowler’s study were frequently moved around, they were not able to learn the affordances of each new setting and were seen as “cuckoos”, continually ejected. Where there were biological offspring already in residence, the process of ejection was faster, probably because in evolutionary terms competition for resources means that parents must inevitably favour their natural children. One child in the Bowler study who was told that she could call the new caregiver mother, was so relieved that she allowed her feelings to surface for the first time in four years. She had constructed meaning that involved a set of expectations associated with the word mother. Thinking she was at last safe, she began to cry on the woman’s bed in an attempt to seek proximity to her new caregiver. The function of this outwardly problematic behaviour was not understood and after three weeks of crying she was considered too difficult to manage and was again moved on.

I thought because she said I could call her mother that she was going to be one. Looking back I see that I got nothing from her (Bowler, 1997, p. 192).

The children in this study developed strategies aimed at meeting their needs that were often misinterpreted by unfamiliar adults as anti-social behaviours.

The child who has exhausted all the nurturing response strategies of a caregiver is no longer able to be reared effectively in that setting and is seen as requiring relocation by professionals who are progressively distant from information relating to the child’s earlier niche experience. Similarly, when a child exhausts all the nurturing strategies of a biological parent, the outcome may be that the parent seeks a classification of the child’s behaviours and intervention in the form of medication. Just as other species use camouflage, children use strategies to protect themselves emotionally, as another participant in the Bowler study revealed.

I was taken to this official looking place but I never batted an eyelid so no-one ever knew what was going on inside me. I instinctively knew that my body language and any words I spoke would give me away and that if I let my feelings show it would have no effect. I was hysterical inside myself with the let-down and pain but outside I was concrete and stone (Bowler, 1997, p. 191).

This response parallels the physiological stress encountered by any other species in unfamiliar territory. While this child had an inhibitory response, another might demonstrate the distractible and seemingly random behaviour that results from a high level of central nervous system excitation. Without an historical and contextual analysis it would be easy to confuse highly aroused behaviour resulting from perceived threat with the criteria applied to children for purposes of clinical diagnosis, such as Attention Deficit Hyperactivity Disorder, or Conduct Disorder. Children who perceive threat, whose nervous system is primed for fight or flight but are powerless to deflect the danger, or move outside its range of impact, are cornered. Triggered anxiety needs to be kept within the survival limits of the body's system and managed in the tolerance limits of the niche. In the face of such threat children use the strategies they think will best serve them to have some control over their situation.

By eight I started switching off. You avert your gaze and will look anywhere except at them. You don't want to see what's written on their face. You can hear it. You can feel it. That's when you start to close down even though the fear's out. (Bowler, p. 191)

This same child stated that even being abused was better than going into another home because of all the emotional energy required in learning the properties of each new residence and trying to use these in ways that were rewarded.

TAKING BACK CONTROL

Reciprocity is basic to the concepts of affordance and niche and is also central to the construct of attachment, defined by John Bowlby as "an active, affectionate, reciprocal enduring relationship between two people whose interaction continues to strengthen their bond" (cited in Papalia & Olds, 1998, p. 159). All attachments are persistent and enduring, whether secure or anxious and insecure in type as defined by the research of Ainsworth. By virtue of its definition, attachment cannot be redefined as the property of the individual and it becomes difficult to accept the hypothesis that attachment issues can become a disorder in the child. Attachment theory encompasses the concept of an internal working model of self in relation to others – a cognitive representation used to predict, interpret and plan for survival (Bretherton, 1996, p. 24-25). After the little girl who cried on her new caregiver's bed realised she was not going to be "mothered", she developed an internal working model of herself as the only person in her world who could be relied on.

At seven I walked up the path to yet another home in disbelief at being given away again but no-one ever knew what I was feeling. People saw me as difficult because I didn't show my feelings. I fought and fought to take care of myself and to analyse what was happening to me (Bowler, 1997, p. 191).

IDENTIFYING SIGNIFICANT ASPECTS OF NICHE

Recruiting resources in a new context, whether these are cuddles, food or teacher time, may require a range of adaptive responses that lie outside the child's current cognitive understandings and response repertoire. Super (1981) concluded that environmental objects such as mats, cribs and toys, combined with the social environment of caretakers and companions, structured the infant's opportunities for developing emergent behavioural potentials. The emotional value of even a small part of a physical environment is known only to the child.

Once when I was moved on the woman kept my dolls. When I unpacked I was upset and confused...I wondered why she'd done it (Bowler, p.188).

Linking attachment with Vygotsky's theory and Bronfenbrenner and Ceci's construct of proximal processes provides us with an understanding of the complexity of human development. There is an endless cycle of exploration and feedback as the individual learns about the physical, cultural, social and emotional properties of the ecological niche in order to grow, learn and thrive. In applying the construct of niche to cognitive functioning, one study made the point that researchers may attempt interventions designed to "enhance processes that may be well-understood in the abstract or in laboratory contexts but are poorly understood in relation to everyday practices" (Gauvain, 1995, p. 42). A theoretical framework using multisystemic units of analysis provides opportunities to examine the influence of dynamic aspects of the niche within these settings relevant to the presenting problem (Annan, 2005). Such information can help explain the functions of the child's behaviours but this is not always easy information to obtain when a family is geographically mobile. An understanding of a child's previous relationships and reinforcement history can further inform intervention. Life history relevant to a referral issue may include information about personal crises such as experience of war, famine, abuse, deprivation, illness or accident.

AVOIDING DE-CONTEXTUALISATION

The term "goodness of fit" was used by Scarr and McCartney (1983) to describe the genes-environment match of children to their family context. They suggested that as children develop and extend their range of experiences and environments they actively seek environments that fit with their genotype and temperament – an activity they called "niche-picking". In this way children and adolescents attempt to overcome power imbalances in their current relationship contexts. The research by Super outlined the relevance of niche factors to a consideration of the child's cultural setting. In New Zealand/Aotearoa an increasingly diverse ethnic population heightens the need for practitioners to establish not only appropriate bicultural practice but the significance of cultural factors in any and all problem analysis. Rigazio-DiGilio, Ivey, Kunkler-Peck and Grady (2005) describe how community genograms can be used to determine cultural

influences as well as the power dynamics within families and communities. The community genogram is a tool that can be used for both assessment and intervention. In partnership with the person involved, it explores and reveals an individual's cultural physical and emotional contexts, social networks, past and present, as well as anticipated future contexts, and the value placed on each of these dimensions.

The community genogram is derived from two concepts. First, the term genogram is used to reinforce the importance of family legacies on physical and psychological development...In traditional models of counselling and therapy these legacies are often only examined in a decontextualised fashion. To place those legacies within the wider dynamic generated by interaction with peer, ethnic, religious and professional networks, the second concept of community is added (Rigazio-DiGilio et al., 2005, p. 2).

As described by these authors, the community genogram has the potential to become a flexible working tool for exploring some aspects of niche, increasing the ecological aspect of assessment relevant to the practice of educational psychology. Rigazio-DiGilio et al provide a number of visual exemplars suggesting how the community genogram could be adapted to work with children, adolescents and adults.

To ignore the dimension of niche can lead to gross misunderstandings through the decontextualization of participants' situations. A dramatic example is an historic 20th century incident involving an Australian Aboriginal community relocated to a tribal housing area development. Confined for the first time in houses, they removed the walls to access the outside environment that held all that was necessary to them for physical survival and emotional health. Not surprising for these times, this response was not interpreted by the authorities in ecological terms but served to reinforce racial stereotypes. Any immigrant community might be expected to attempt to recover lost niche affordances, whether through backyard ovens, the opening of shops selling particular foods or publications in the language of origin. The long-term implications of loss of niche are further illustrated by the situation of the unescorted children Britain removed from their families during World War II and sent to New Zealand and other Commonwealth countries to live with strangers, on the mistaken assumption they would experience nurturing and a similar culture. Fifty years later these New Zealand immigrants formed an association to deal with unresolved issues of loss.

SUMMARY

The developmental significance of an ecological approach lies in its potential to encompass all the domains of human development. While physical interactions characterise niche embeddedness, the cognitive and emotional domains are enmeshed in children's interactions with the resources of the environment. The reciprocity and totality of these interactions forms the individual's cognitive, emotional,

social and cultural context and all this experience impacts cumulatively on learning and well-being. While niche analysis is a more complicated business than using standardised tests, checklists, or the verbal reports of adults, it should at least be attempted if any problem analysis is to be truly ecological.

Examples suggest that at least three relevant aspects of niche can be elicited during the process of an assessment. These are:

- the degree of power children have over their situations and their capacity to effect change,
- the emotional significance of places, objects and activities and the degree to which loss of valued dimensions relating to these has occurred, and/or might be recovered,
- the child's characteristic mode of relating to situations and contexts that trigger anxiety, along with their opportunities and facility for learning new strategies.

The challenge in the practice of educational psychology is the further development of information-gathering frameworks and models to facilitate microanalysis of the child's contexts as they impact upon learning and development. This is not a challenge confined to educational psychologists. The discussion in this article is intended to encourage dialogue among all those who work within an contextual fieldwork model over what is involved in a real, versus espoused, ecological approach to the assessment of children's needs. Such dialogue has the potential to further inform developmentally and culturally relevant interventions across settings.

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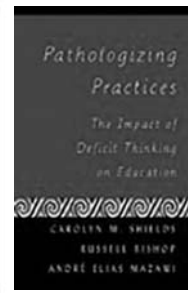
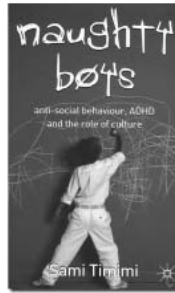
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Dr Josephine Bowler is currently working as a relieving psychologist with GSE. She left Massey University in 2005 after 10 years as a lecturer in the College of Education. She was formerly a teacher and, after graduating as an educational psychologist in 1980, worked in South Auckland and on the North Shore. She has a PhD in education and is also a published children's poet.

Kairaranga Book Reviews



NAUGHTY BOYS: ANTI SOCIAL BEHAVIOUR, ADHD AND THE ROLE OF CULTURE

Sami Timimi

In this book Sami Timimi, a consultant child and adolescent psychiatrist, goes to the heart of the problem and challenges contemporary conceptualisations of children and child behaviour. Drawing from many disciplines, such as psychology, psychiatry, sociology, anthropology, philosophy and politics, Timimi critically appraises cultural differences in child rearing, the medicalisation of problematic children (especially boys) and modern practice in relation to boys deemed to be 'troublesome'. Along the way Timimi exposes some of the myths surrounding child psychiatric disorders. Why is it that boys are significantly over represented in statistics for child psychiatric disorders? Why do boys outnumber girls 4:1 for the ADHD diagnosis? Why is it that in Western culture we focus on diagnosing children with psychiatric disorders that require powerful psychiatric drugs to 'treat', and we dismiss the social and cultural and situational influences on their behaviour as simply incidental? Why is it that everyone wants to focus on the child as the source of the problem? Alternative conceptualisations are introduced that challenge us to draw lessons from how children are perceived and treated in the developing world. The role of culture in defining and shaping our perceptions and directing our actions is a central feature underpinning the book. In eight chapters spread over 254 pages, Timimi manages to pack a wealth of information into this book that is guaranteed to add value to any professional's knowledge base, both in terms of theoretical argument and practical application.

Professionals with vested interests in diagnosing children may brace themselves for some healthy but challenging criticism. This is a very good place to start for those who wish to gain a broad yet focused understanding of the issues surrounding "naughty boys". This is definitely one book that should adorn the book shelves of all those involved in helping children and families to cope with and manage difficult behaviour.

REVIEWER PROFILE

Terence Edwards

Terence Edwards is a psychologist and lecturer on the Educational Psychology Training Programme at Massey University.

BIBLIOGRAPHICAL DATA

Title: Naughty Boys: Anti social behaviour, ADHD and the role of culture

Author: Sami Timimi

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GIFTED AND TALENTED: NEW ZEALAND PERSPECTIVES (SECOND EDITION)

Don McAlpine and Roger Moltzen

The foreword by Joseph Renzulli, Director of the National Research Centre on the Gifted and Talented University of Connecticut, is an inspirational beginning to this edition, which includes updated information on a range of important issues in the field of gifted education. The book consists of 21 chapters reflecting the authors' combined knowledge of research that verifies the necessity for effective programmes to support gifted and talented students. The significance of the role of the school to develop the talents and potentials of many students, who have traditionally been excluded, is emphasised throughout the book.

Chapter one by Roger Moltzen provides an historical perspective of gifted and talented education in New Zealand. The past reluctance of our country to attend to the needs of our most able students, preferring a more egalitarian approach with the view that the clever ones "will make it on their own," has fortunately been challenged and New Zealand's current initiatives and approaches can be applauded.

Chapter two by Don McAlpine provides many definitions and concepts of the term gifted and talented, this is important because definitions pave the way we go about identifying students and how we can best respond to their needs. McAlpine stresses in chapter four that a cooperative team approach is valuable for identifying gifted and talented students. This approach advocates that teachers pool their resources and experiences.

Robyn MacLeod looks at ways secondary schools can accommodate gifted and talented students and provides well-researched models and programmes. Tracy Riley discusses curriculum models and qualitative differentiation

for gifted and talented students. The chapters on parenting by Nikki Fraser and home schooling by Jean Hendy-Harris will be of particular interest for parents. Other high calibre authors who have contributed to this second edition include Jill Bevan-Brown, Deborah Fraser, David Keen, Louise Porter, Catherine Rawlinson, Neil Reid, Shirley Taylor and Michael Townsend.

As a RTL, I found 'Celebrating The Square Peg: Gifted with specific learning difficulties' by Anne Sturgess engaging. Sturgess states that to many, academic giftedness and specific learning difficulties (GLD) are not mutually exclusive. She identifies the failure to identify and nurture giftedness among those with learning difficulties as detrimental to the individual and counterproductive to the development of society. The inability to present written work that reflects the elaborate language they are able to articulate in everyday conversation is an area of concern for these students. Included in this chapter is a table identifying characteristics of GLD students.

If New Zealand is to implement and maintain quality programmes for our gifted learners, this book, which is supported with research and practical suggestions, will be of immense value for educators. Teachers with little knowledge of gifted children and stimulating programmes will still find it interesting and informative. With its inclusive approach to the education of gifted and talented students, this book will be a valuable resource to those committed to and interested in meeting the needs of gifted and talented students, including teachers, RTL, parents, educational policy makers and professionals.

REVIEWER PROFILE

Sue Taylor

Sue Taylor is a RTL based in the Fairfield Cluster, Hamilton.

BIOGRAPHICAL DATA

Title: Gifted and Talented: New Zealand perspectives

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PATHOLOGIZING PRACTICES: THE IMPACT OF DEFICIT THINKING ON EDUCATION

Carolyn M. Shields, Russell Bishop and André Elias Mazawi

In *Pathologizing Practices: The impact of deficit thinking on education* the authors raise the readers' perceptions of the severe and incapacitating effects of pathologising, on the lived experiences of indigenous children. They examine the discourses of educators and then considering the impact of these on the educational experiences of three specific groups of students.

These authors define pathologising as:

... a process where perceived structural-functional, cultural, or epistemological deviation from an assumed normal state is ascribed to another group as a product of power relationships, whereby the less powerful group is deemed to be abnormal in some way. Pathologizing is a mode of colonization used to govern, regulate, manage, marginalize, or minoritise, primarily through hegemonic discourses (page X).

The authors use three direct educator quotes to introduce the purpose of the book and the common researcher experiences that have brought them together from different parts of the world. They then provide an historical overview to the pathologising practices and deficit thinking that has emerged in many colonised countries including their own. They argue how these practices have generated policies that continue to pathologise the lived reality of colonised peoples and in turn result in unequal educational outcomes for the children of these people. Importantly, these authors then suggest solutions, which they argue from both a theoretical and practical perspective. Their guiding beliefs, grounded in social justice, moral leadership and critical constructionism challenge the reader to examine, the lived realities of other indigenous peoples in education and subsequently in wider society from the perspectives of these children and some of their educators. In so doing, the reader is also challenged to examine their own positioning and beliefs on these matters.

Three chapters are dedicated to the specific research conducted by each of the three authors. Shields conducted her research with a group of educators and parents of Navajo students in the United States, Bishop with a group of educators of Māori students in New Zealand and Masawi with a group of educators of Bedouin students in Israel. Each author deconstructs the power relationships in the public education that have led to education systems that have continued to pathologise the lived experiences of these groups of indigenous children, and are continuing to support and perpetuate social inequality. They refer to these students as 'minoritized', using the term to emphasise that whether students are in the numerical minority or majority, many are subjected to oppression and suppression by elements of the dominant discourse, in that they continue to be excluded from decision making and other positions of power.

This book does not merely seek to criticise the injustices that began in the educational contexts delivered by past colonising powers, rather it is a book of solutions. The last two chapters are committed to alternative pedagogies that have evaded educators in many countries for far too long. Assuming personal and professional responsibility to seek and work with solutions from positions of agency, rather than abrogate responsibility to change, is a key. The authors detail self-determining pathways achievable when de-pathologising practices. New discourses emerge from improved relationships and interactions built on positioning that comes without blame but with mutual belief and respect. The serious nature of this book is never in any doubt and the ongoing voice of the participants makes this a thought provoking and compelling read for all educators.

REVIEWER PROFILE

Mere Berryman

Mere is of Māori descent and affiliated to Ngai Tuhoe. After many years of teaching experience, both in English and bilingual settings, she began work in the field of special education, then on to educational research. Mere manages the Ministry of Education – Special Education Poutama Pounamu Education Research and Development Centre. This research group endeavours to work collaboratively in ways that are responsive to Māori.

BIBLIOGRAPHICAL DATA

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