Talent in the New Millennium: A two-year research study of gifted education

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"Talent in the New Millennium" was a research study into gifted education, conducted over a two-year period in 68 centres and schools in three disparate regions of New Zealand. Using questionnaires, oral interviews and sample case studies, the study drew input from educators of the gifted, from children and students identified as gifted, and from the parents and caregivers of children thus identified.

Through this input, the study sought information on how giftedness popularly is defined; the demographic profile of those identified as gifted; the range of strategies used to address the needs of those identified as gifted. From the identified gifted and their parents/caregivers, the study sought evaluative comment about these strategies.

The study's findings highlight areas of strength, potential and deficit in gifted education in New Zealand.

Early childhood education, ethnicity, gifted, definition, identification

THE STUDY

Talent in the New Millennium, a two-year research study of gifted education, commenced at the beginning of the year 2001. Coordinated through the Dunedin College of Education, the study involved 68 education providers, with an aggregate roll of 10,236 children and students, as presented in Table 1. These providers were sited in three regions of New Zealand, namely Otago and Southland, in New Zealand's South Island and, in the North Island, the Bay of Plenty. Although every region of New Zealand is culturally diverse, Otago and Southland each claim a strong Scottish and, to some extent, Irish heritage. The Bay of Plenty has strong Maori cultural links. All early childhood education centres and all primary, intermediate and secondary schools in Otago and Southland were invited to take part in the study, and about a fifth elected to do so. In the Bay of Plenty, three primary schools, one intermediate school and one secondary school joined Talent in the New Millennium, by invitation. The purpose of this invitation was to afford, within the study, a measure of inter-regional comparison.

Table 1. Institutions taking part in *Talent in the New Millennium*

Type of institution	Number participating
Early childhood education centre	21
Primary school	28
Intermediate school	3
Secondary school	16
Urban setting	46
Provincial setting	7
Rural setting	15
Total number of institutions involved	68

The participants constituted a sample representative of the early childhood, primary and secondary educational sectors, in rural and urban settings, and sited in diverse socio-economic catchment

areas. All the participating institutions however, except for the five schools located in the Bay of Plenty, were self-selected volunteers. Inevitably, granted the range and fluidity of their circumstances, not all of the participating institutions were able to fulfil all aspects of *Talent in the New Millennium*'s two-year schedule. It must be accepted, therefore, that the study's findings afford useful, but necessarily incomplete, insight into perception and practice, in relation to gifted education, among an interested, twenty-per-cent minority of schools. *Talent in the New Millennium*'s implementation proceeded through six stages, as outlined in Table 2.

Table 2. Implementation of Talent in the New Millennium

Year 2001	Investigation of:
Stage 1 March	Participants' definitions of giftedness
Stage 2 June-July	• Demographic profile of the identified gifted, and approaches to servicing the needs of the identified gifted
Stage 3 September-October	• Students' and parents'/caregivers' perceptions and evaluation of these approaches
Year 2002	Reflection, triangulation and interpretation:
Stage 4 April-May	• Evaluation of the Year 2001 program
Stage 5 May-September	• Implementation of interpretive case studies
Stage 6	• Establishment of guidelines for future research and practice

The study explored, firstly, definitions and perceptions of giftedness both among schools and their wider communities. Secondly, it pieced together the demographic profile of the children and students whom the participating centres and schools identified as gifted. Thirdly, it assessed the impact of programs of gifted education from the several perspectives of the participating students and their parents or caregivers. The fourth stage of the study centred on a series of four regional workshops. These took place, respectively, in Dunedin, Alexandra (Central Otago), Invercargill (Southland) and Tauranga (Western Bay of Plenty). The workshops afforded opportunities for an evaluative sharing of concept and practice among representatives from participating schools. The fifth stage tested *Talent in the New Millennium*'s interim findings against evidence provided by specific case studies of giftedness, carried out over a five-month period in 11 of the 68 enrolled centres. The final, interpretive stage of the study set out guidelines for future research and practice in relation to giftedness. From these guidelines has evolved a derivative, longitudinal research study, *Tracking Talent*, scheduled to run through 2004 and 2005.

METHODS OF RESEARCH

As regards its methodology, Talent in the New Millennium used both quantitative and qualitative approaches. A quantitative dimension was provided by two sets of questionnaires administered, respectively, in March 2001 and in June-July 2001, to teachers in each of the 68 participating centres and schools. Further sets of questionnaires were given, in September-October 2001, to identified-gifted children and students enrolled at the participating centres and schools, and to their parents and caregivers. In total, 258 identified-gifted children and students and 254 parents/caregivers of these children and students, representing 38 centre and school communities, completed the September-October 2001 questionnaires. A qualitative dimension to the study emerged through the series of regional workshops, held during April and May 2002. These workshops, following a semi-structured format, were attended by between one and seven representatives, severally, from each of 27 centres and schools. A further qualitative dimension emerged from the 11 case-study profiles, which were developed during Stage 5 of Talent in the New Millennium, in the period May-September 2002. The profiles synthesised the results of observation, interviews, the monitoring of work records and student diaries, staff networking and parental contact. Compiling the profiles entailed a significant commitment of time by schools with a particularly strong interest in gifted education.

RESULTS

Giftedness, of its very essence, is multifaceted. The results of Talent in the New Millennium highlighted the variety and fluidity of giftedness among young people, a variety evident both in the personality traits and interests of the gifted young and in the range of their preferred contexts for, and styles of, learning. Asked to rate, on a 1 to 4 Likert scale, each item in a list of some 20 learning contexts and styles, the 258 children and students responding to Stage 3 of Talent in the New Millennium, during September-October 2001, offered the full gamut of replies. On the 4-step scale, to which the children and students were working, a Level 1 rating indicated strong support or agreement, a Level 2 rating moderate support or agreement, a Level 3 rating moderate disapproval, dislike or disagreement, and Level 4 strong disapproval, dislike or disagreement. None of the 20 listed learning contexts and styles drew an unequivocal rating from the responding students. Table 3, groups and classifies the students' patterns of response. Socio-learning contexts involving ownership and choice emerged clearly as the most preferred option among the responders, with problem-solving and reading featuring as the runners-up. Experiential learning was favoured over passive listening, which emerged as the least preferred option of the responding students. Second-least popular, especially among secondary school responders, were contexts requiring affective engagement or expression of feeling – a function, perhaps, of the insecurities and shyness of adolescence. Even these contexts, however, attracted more positive rather than negative ratings among responding children and students at every level of schooling. Gifted and talented students, it seems, can squeeze some benefit out of almost any socioeducational context.

Table 3. Gifted students' rating of learning styles and contexts

Learning style or context	Percentage of gifted students
Contexts affording choice to the student	93
Problem-solving contexts	87
Learning through reading	84
Contexts allowing or promoting the use of computer technology	78
Learning through watching	78
Learning through interaction with age peers	78
Practical contexts, for example, model-making	75
Contexts involving physical activity, for example, sport	74
Contexts involving argument and debate	69
Contexts calling for use of the imagination	69
Learning through interaction with adults or older people	69
Contexts calling for the engagement or expression of feeling	67
Learning through listening	65
Contexts involving argument and debate Contexts calling for use of the imagination Learning through interaction with adults or older people Contexts calling for the engagement or expression of feeling	69 69 69 67

^{*}according positive responses (that is, Levels 1 or 2 responses on a 4-step Likert scale)

Affording a measure of triangulation to *Talent in the New Millennium*, the 11 gifted children and students profiled at Stage 5 of the study, during May-September 2002, mirrored the diversity of the wider body of student participants. The profiled students displayed a striking range of attribute and need, and gave evidence of change over time: socialites and loners; conservatives and rebels; perfectionists and dilettantes; broad spectrum high achievers and specialists; extroverts and introverts, and the autistic. Each of these qualities and conditions was represented among the eleven profiled students and, in some cases, contrasting pairs of qualities were manifest, according to circumstance and time, within the experience of single individuals.

Precisely because of its essential dynamism, giftedness creates difficulties of definition, identification and address for practitioners in the field. Giftedness is not a state but a process. Inevitably, therefore, tension arises between the identification of, and provision for, gifted students. Identification resembles the taking of a snapshot. Identification is a freeze-frame within a movie. Provision, however, has to set the movie rolling once more and adapt to its changing

scenario. The dichotomy between the identification of, and provision for, giftedness is shown diagrammatically in Figure 1.

For staff at some schools participating in Talent in the New Millennium, issues of definition and address in a context as elusive as giftedness proved divisive. It became evident, during the Stage 4 workshop phase of *Talent in the New Millennium*, April-May 2002, that participating schools with effective gifted programs invested a great amount of effort in whole-staff consultation and in community networking. It was evident, also, that primary schools found consultation and networking relatively easier to achieve than did secondary schools. Primary schools, as a rule, are smaller, have shorter lines of communication and are less diffuse in structure than are their secondary counterparts. It is easier in a primary school than it is in a secondary school to give the whole school community a common focus, whether that focus relates to giftedness or to any aspect of educational activity (Flude, Glaister and Keen, 2002, p.14). Regardless of school type, however, Talent in the New Millennium showed schools with informed and supportive principals and boards of trustees, and with dedicated committees of staff members, as being well-placed to cope with the challenges of gifted education – challenges which, generally, are too demanding to load on to a single staff coordinator. Recent research undertaken by Massey University, Palmerston North, on behalf of the New Zealand Ministry of Education, corroborates this finding (Ministry of Education, NZ, 2004, *Case Studies*, p.47).

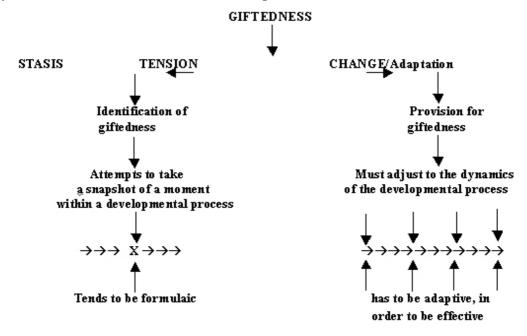


Figure 1. The dichotomy between the identification of, and provision for, giftedness

From the earliest stages of *Talent in the New Millennium*, the difficulty of achieving synthesis amid diverse perspectives became apparent. Among the study's participants, approximately a sixth of the early childhood education centres and schools, and a larger proportion of parents, felt unable to define giftedness. Secondary teachers, especially, expressed difficulty in this regard. A minority of early childhood providers rejected definition *per se*, not on the grounds that it was impossible but rather that it was inappropriate. These commentators based their argument on the holistic nature of early childhood programs and rejected labels, including the label 'gifted', as intrinsically compartmentalising and, therefore, incompatible with a sound curricular philosophy (for example, Ministry of Education, NZ, 1996, p.14). Labels, it was held, inherently circumscribe and, thus, actually impede the attainment of the very goals which gifted education, theoretically, espouses. Some early childhood centres, on the other hand, and especially those run on Montessori lines, embraced the concept of gifted education.

It would be valuable for the early childhood education sector in New Zealand to run its own internal debate regarding its philosophy in relation to giftedness, and the outcomes of this debate would be of wider interest. A degree of sympathy with early childhood centre reservations regarding gifted education now has become apparent among some primary and secondary schools taking part in *Tracking Talent*, the research project, noted above, which has derived from *Talent in the New Millennium*, and which, currently, is running in Otago and Southland. Teachers associated with *Tracking Talent*, generally, have welcomed the enhanced profile accorded to giftedness this year, 2004, in the New Zealand Ministry of Education's revised *National Administrative Guidelines*. However, some teachers fear that this enhanced profile will be reconfigured to suit an administratively-driven imperative of *accountability* and, thence, will become linked to inappropriate demands for *measurable outcomes*, killing the spirit of gifted education.

Even where early childhood centre or school communities associated with Talent in the New Millennium seemed to agree, the veneer of agreement often masked fundamental differences of understanding regarding the definition and identification of giftedness and talent. Over 80 per cent of school responders to Talent in the New Millennium, and over 70 per cent of participating parents, defined giftedness normatively, in relation to the anticipated performance levels of cohorts of age peers. This approach, however, provided no guarantee of unanimity of identification. Teachers and parents disagreed profoundly, among themselves, as to where, on a quantitative continuum, the cut-off point for giftedness might lie. On average, centres and schools taking part in *Talent in the New Millennium* identified 9.4 per cent of their children and students as gifted. However, very few actually identified and selected at the mathematically average rate; statistics may well conceal rather than elucidate reality! Most centres and schools taking part in Talent in the New Millennium either identified 5 per cent or less of their children and students as gifted, or else identified between 12 and 15 per cent. Survey responses showed this pattern to be spread evenly across the socio-economic spectrum of participating centres and schools. Those identifying at the lower rates insisted on demonstrated performance rather than indicative potential as evidence of giftedness, and excluded the gifted underachiever from their tally.

Responders, also, looked for evidence of giftedness in different areas. For secondary teachers, the focus tended to fall on the student's conceptual range or facility of access to the realm of abstract thought. For teachers of primary-age children, it fell on facility in numeracy, language or recall and, at the pre-school level, on the child's perception of spatial relations and fine motor skills. Parents, when asked what first led them to recognise giftedness in their own children, highlighted, in at least two-thirds of cases, qualitative intangibles of attitude, emphasising the child's passionate interests, powers of self-motivation and concentration, insatiable curiosity and, also, sense of humour. Markedly more than parents, schools, on the other hand, emphasised originality and creativity as hallmarks of giftedness.

Program participants, also, diverged in their understanding of the term *talent*. Some regarded giftedness and talent as synonymous. Some, particularly education professionals, accepted a Gagnéan differentiation between giftedness as genetically endowed potential and talent as environmentally nurtured performance (Gagné, 1985, 2003). Others, parents rather than schools, distinguished giftedness and talent in terms of performance range. For these responders, giftedness represented broad-spectrum excellence, while talent represented attainment in a specific domain. About a fifth of schools and about half of all parent responders to *Talent in the New Millennium* differentiated giftedness and talent in this way. A smaller number of parent responders differentiated giftedness and talent in terms of outlay of effort. For this group, giftedness denoted seemingly effortless performance. Talent was the painstaking output of the "average to bright" (Keen, 2001, p.4).

Diversity of perception regarding the fluid processes of giftedness and talent was mirrored in the range of identification procedures favoured by the several educational sectors. Seemingly, identification strategy is a function of school size, pupil-staff ratio and relative degrees of complexity within school organisational structures. Among *Talent in the New Millennium*'s participants, observational approaches to gifted identification predominated in early childhood centres and primary schools. Behavioural profiles were favoured particularly by teachers in early childhood centres, reflecting the personalised bond which these centres, typically enjoying small rolls and favourable adult-child ratios, were able to cultivate with their children. Cumulative work and attainment profiles were favoured among primary school teachers, both for convenience and perceived reliability. Secondary schools, generally larger and more complex in structure than their primary counterparts, gave prominence to formal, academic testing, whether by agency of one of a range of standardised instruments, or in the context of the schools' own internal assessment programs, or through the public examination system. Secondary teachers did not necessarily rate formal academic tests as more reliable than other procedures for identifying giftedness, but they found them to be more manageable.

Among other identification instruments available to schools but seldom used, secondary teachers gave the psychological services, generally, a positive rating for reliability, but did not use the services because they were too expensive. Stretched budgets constrain schools to choose between support for mainstreamed *special needs* students or for the psychological diagnosis of the gifted underachiever. Seemingly, the gifted underachiever misses out, while the harassed coordinator of gifted programs laments his or her own lack of training in therapeutic counselling. *Pari passu*, the secondary schools' own guidance counsellors generally lack training in gifted education. Moreover, professional commitment to client confidentiality can make it difficult for the secondary school guidance counsellor to contribute within a gifted education committee or team. Primary and intermediate schools, enrolled in *Talent in the New Millennium*, stated that they would integrate teacher-counsellors into the shaping and delivery of their gifted programs, were they allowed to employ such people.

Talent in the New Millennium's participating schools, in fact, saw resourcing in all its aspects as fundamental to their servicing of gifted students' needs. The schools sought money to buy resources for enrichment and extension, and to purchase the physical space in which to store these resources and conduct appropriate programs. They looked for money to buy teacher time to levels adequate for the processes of identification, networking and program preparation and delivery. They sought funding for teacher in-service training, prioritising training for the schools' leaders, the principals and boards of trustees.

Parents responding to *Talent in the New Millennium* concurred in the need for teacher training. In open-ended comment appended to written questionnaires, some 20 per cent of responding parents alluded to the crucial role of the teacher, for better or worse, in their children's school performance, their comments corroborating current research findings identifying teacher effectiveness as a key determinant of educational outcomes (Hattie, 2002, pp.5-6). About half of the parental comment regarding teacher influence was strongly supportive. Parents saw the effective teacher of gifted children as possessing, not necessarily exceptional academic qualifications, but exceptional attitudes. They saw their children flourishing in the care of teachers who valued, and empathised with, their children's interests, and who had the willingness and humility to be fellow travellers in inquiry. Negative parental comment, on the other hand, complained to a small degree of teacher apathy regarding giftedness, to a larger degree of the perceived effects of the 'tall poppy' syndrome in New Zealand education and, above all, to alleged deficiencies in teacher training which left the classroom practitioner with a conceptual void in a crucial area. Parents who were themselves trained teachers complained that too little has been

done in New Zealand's colleges and university schools of education to address the teaching of gifted and talented pupils.

Consistently, parents associated with *Talent in the New Millennium* expressed a desire for earlier and closer relations with the schools, whether in respect of the identification of giftedness or in ongoing networks of mutual support; parents in New Zealand today seem to have moved from the markedly egalitarian ethos that prevailed in the 1960s, an ethos which made parents during that era somewhat diffident regarding their children's abilities (Knudson, 2003, p.287). Less than half of the 254 parents and caregivers responding to Stage 3 of Talent in the New Millennium, during September-October 2001, felt well informed about the provision for giftedness at the early childhood education centres or schools that their children attended. At least a fifth of the parents wished that their children's giftedness had been identified, and the identification acted upon, at an earlier stage of schooling. On the other hand, for schools associated with Talent in the New Millennium, contact with parents, on occasion, has proved to be problematic. Some teachers, both in written comment and oral comment, expressed concern regarding parental bias or parental politicking. Some feared that parental expectations and attitudes might compound anxiety problems for the gifted child. However, most teachers, whether responding to Talent in the New Millennium or to its current derivative, Tracking Talent, accepted, or do accept, that parents are rich and uniquely valuable sources of information and support regarding gifted identification and provision, and that school-home networks should be fostered, in spite of the mutual sensitivities involved.

Precisely because perceptions of giftedness are both rich and controversial in their diversity, it is desirable that gifted identification and provision should involve networking, within and between schools, between schools and agencies of support within the community, and between schools and parents. Patterns of response from Talent in the New Millennium participants suggest that interschool networking and community networking in New Zealand both currently are underdeveloped, especially in relation to the potential input of the early childhood sector. Some early childhood practitioners, attending workshops in association with Talent in the New Millennium, asserted strongly that their intimate, observational knowledge of children gave them insight into gifted potential long before it was picked up in the wider school system. In the perception of these early childhood teachers, primary new entrant programs focus on the homogeneous at the expense of the idiosyncratic, and on whole-group socialisation at the expense of individualised gifted enrichment. Peters (2002, p.96) has noted that primary new entrant teachers experience "internal tensions from the competing demands of their role, as they [try] to balance espoused child-centred approaches to learning with the practicalities of helping thirty justturned-five-year-olds adapt to the rules and routines of the school environment". Teaching is the vision of the ideal, re-sketched as the art of the possible. Squeezed between competing priorities, information forwarded from early childhood centres to primary new entrant classes sometimes is ignored. Conscious of the constructive contribution which they could make to gifted education, early childhood centres associated with Talent in the New Millennium voiced frustration at the extent to which they saw themselves as marginalised, both at local level and as regards central policy on giftedness.

Better lateral networking between home and school, and better vertical networking between the several levels of education, might help to correct some of the imbalances in the demographic profile of students currently identified as gifted. Theories of giftedness maintain that giftedness and talent are gender-neutral, and are manifest in every ethnic, cultural and socio-economic setting (Cathcart, 1994, p.197; Ministry of Education, NZ, 2004, *Conclusions*, p.1). Gender ratios among the students noted as gifted in *Talent in the New Millennium* did, indeed, match the expectations of theory; among a tally of approximately 10,000 children and students associated with the study, 9.6 per cent of boys were identified as gifted and 9.2 per cent of girls were so identified. The same

could not be said in relation to socio-economic profile. Over a third of *Talent in the New Millennium*'s identified gifted came from professional homes and, of this third, almost 50 per cent, that is, almost a sixth of all the identified gifted, came from homes associated professionally with education. These figures far exceed the proportion of professionals and, particularly, educational professionals in the New Zealand population as a whole, as shown in census-based statistical reports (Statistics New Zealand 1999 and 2000). Conversely, children from semi-skilled or unskilled labouring backgrounds, and the children of the unemployed, proportionally were underrepresented in *Talent in the New Millennium*. Interesting detail, available from the 11 case studies deriving from Stage 5 of *Talent in the New Millennium*, May-September 2002, suggested that mothers with professional qualifications, rather than fathers, might exercise an especially strong influence in relation to gifted development. Anecdotal comment deriving from studies conducted in Otago during the 1960s supports this finding (Knudson, 2003, p.287), as does preliminary information from the *Tracking Talent* study, 2004. It is not clear whether the finding, if proved to be valid, is socially generic, or whether it relates to specific circumstances within current New Zealand society.

A further cause for concern in the profile of giftedness deriving from *Talent in the New Millennium* relates to student ethnicity, as presented in Table 4.

Table 4. Ethnicity of children and students identified as gifted and talented in schools and centres taking part in Stage 2 of *Talent in the New Millennium*, June-July 2001

Ethnic group	Number enrolled	Percentage identified as gifted/talented
New Zealand European	7534	10.0
Maori	923	5.6
Other Polynesian	63	4.8
Asian	301	9.3
Other ethnic groups	223	7.6

Among pupils taking part in the study, those of New Zealand European stock headed Table 4 of the identified gifted, while those of other ethnicity fared less well. Maori and other Polynesian children and students comprised some 11 per cent of the aggregate enrolment in centres and schools involved in the study. Seemingly these children and students, relative to roll numbers, were identified as gifted and talented at about half the rate for New Europeans and Asians, and at lower rates, also, relative to other ethnic groups. Gifted performance is culturally conditioned (Bevan-Brown, 1996, p.91; 2003). In Maori cultural terms, giftedness may be regarded as an attribute of the group rather than of the individual. Certainly, to be meaningful in Maori terms, giftedness should be exercised in community service. Also, to a greater degree than is expected in contemporary western culture, Maori giftedness should embody a spiritual dimension. New Zealand's educational system, multicultural in its ideals, faces challenges, as yet unaddressed, in recognising and fostering giftedness in diverse socio-economic and ethnic settings.

Nevertheless, notwithstanding difficulties and inequities of identification and provision, schooling has proved to be an enjoyable or, at least, acceptable experience for a four-fifths majority of the identified gifted children and students taking part in *Talent in the New Millennium*. Responders valued their schooling for its range of curricular and co-curricular opportunities. As regards preferred content areas within the school program, students responding to *Talent in the New Millennium*'s Stage 3 questionnaires, September-October 2001, both in structured answers and in open-ended supplementary comment, often expressed affinity with language, mathematics, science or computing. More than half the students played a range of sports, and almost half were involved in music or dance, both in school and as leisure activities. Art and drama tended not to emerge as interests until the later years of secondary schooling. There was some tendency for girls to favour language as an area of interest, and for boys to favour mathematics, sport and outdoor education. Gifted boys, markedly more than girls, cited computing as an active interest. These

gender-related tendencies emerged even more clearly in information supplied by parents, regarding their children's interests, than they did in information supplied by the children themselves; it is not clear, from the research, if or to what degree the parents shaped, rather than merely observed and described, their children's choices and preferences. However, the high status of music among the interests of gifted young people associated with *Talent in the New Millennium*, equally reported by gifted boys, girls and their parents, suggests that this subject should be promoted more vigorously in schools. Current trends towards downgrading music as a mainstream element in New Zealand curriculum delivery are of concern. Also, the paucity of reference to social studies in the curricular perceptions of gifted students should be of concern to teachers of the social sciences in New Zealand.

Compared with the 80 per cent majority, a 20 per cent minority of gifted children and students responding to Talent in the New Millennium expressed an overt dislike of school. Qualitative feedback from the children and students concerned suggested two reasons for their antipathy. Firstly, two-thirds of the young gifted who disliked school reported their schoolwork as being easy or very easy. In marked contrast, of the gifted students who expressed positive enjoyment of school, 45 per cent, that is, rather less than half, found their schoolwork to be easy. Typically, it seems, the gifted pupil who is unhappy at school is under-challenged and therefore bored, a symptom that emerged more commonly among primary rather than secondary students responding to Talent in the New Millennium. Challenge, it seems, was a feature intrinsic too much examination-focused work in the senior classes of New Zealand secondary schools; it remains to be seen whether this will hold true for work associated with the National Certificate of Educational Attainment which, currently, is being introduced into the New Zealand secondary school system in place of the former examination regime. A second issue for Talent in the New Millennium's dissatisfied gifted related to groupwork, much used in New Zealand schools as a vehicle of socialisation. Groupwork was enjoyed by the gifted when it involved interaction with like-minded peers. It was resented when it placed the gifted in partnership with the apathetic. Numerous gifted students in group situations had experienced peer pressure, in various guises, to dumb down their performance. There was some, perhaps derivative, tendency for Talent in the New Millennium's dissatisfied gifted to prefer working alone. Mentorships, with a partner wider in experience but not too dissimilar in age, might be useful in such cases.

School, evidently, can be an anxious place for the gifted. Most of the 11 students involved in Talent in the New Millennium's Stage 5, May-September 2002 case studies, to varying degrees, expressed anxieties, several with regard to peer relations. One student felt herself to be tactless in her handling of, in her perception, less intelligent associates. Another, an accelerated student, moved tentatively between tiers of friendship, her attainment peers at school and her age peers in her leisure hours. Public recognition of their achievements overtly was important to most of the students, and all sought out, and drove themselves in, academic and sporting competition, risking peer jealousy in the process. Side effects of the drive for success, in some respects, were negative. A younger student voiced concern lest she fail to match the standards of an older sibling. For another, perfectionism encouraged risk aversion and a preference for a limited range of safe challenges. Implicit in some student comment was a fear of failure to match parental expectations. Some students, on the other hand, accepted challenges to a level where time management became a significant issue. The experience and perceptions of these students are not unique. Already, in the early stages of Tracking Talent, the current, ongoing research study derived from Talent in the New Millennium, perfectionism, time management and the need for peer recognition and approval are emerging as issues for some of the participating gifted students.

Talent in the New Millennium's research could not, and did not, attempt to evaluate the extent to which, and the circumstances under which, anxiety might serve as a positive spur to gifted performance, or as a negative inhibitor. Self-awareness of giftedness, it seems, is socially

constructed and this self-awareness, for better or worse, comes freighted with a measure of anxiety. Each of the 11 students featuring as subjects in Talent in the New Millennium's Stage five case studies became aware of his or her own giftedness while at primary school, usually during the later years of primary schooling. For about half of the students, the catalysts were external, with teacher comment, test results and parental comment being cited prominently by the children concerned. The remainder of the student responders developed an intuitive awareness that their interest range and work output, qualitatively, were different from those of their age peers. Comments from students involved in the early stages of Tracking Talent, April 2004, indicate a similar, intuitive awareness, deriving from age-peer interaction. Interestingly, however, those students who, in *Tracking Talent*, have extensive, first-hand experience of working with their attainment, rather than age, peers, do not see themselves as gifted; in a community of like minds and interests, they perceive themselves as average. A parallel instance is provided by a cohort of identified-gifted children who, for a year of their primary schooling in Dunedin during the 1960s, were taught in a dedicated class. In keeping with the egalitarian ethos of the time, neither their teachers nor their parents told the children the basis on which the class had been selected. Interviewed some thirty years later, as adults in middle age, the former scholars of the Dunedin class remained unaware that the class had been created on the basis of giftedness (Knudson, 2003, pp.298-299).

Giftedness, thus, together with its concomitant concepts of success and failure, are socially mediated terms. A major task, alike, for teachers and parents of the gifted is to help the gifted child or student reconceptualise perceived failure as a positive and useful, even necessary, stepping stone on the pathway of success. In this connection, advice provided by parents of identified-gifted children and students taking part in Talent in the New Millennium is apposite both for the home and the school. Talent in the New Millennium's parents saw the gifted-effective home as a place of open communication, which mutually shared and celebrated the interests and passions of all its members. It acknowledged, valued and drew constructively on the resources of the extended family, including siblings, uncles, aunts and grandparents. Rather than money, it invested quality time in its children; cash-strapped solo parents of gifted children, however, qualified this seemingly easy assertion with expressions of regret at their financial inability to access the range of learning experiences available to their better-heeled neighbours. Nevertheless, Talent in the New Millennium's parents of the gifted, across the socio-economic spectrum, maintained that the most important task of the gifted-effective home is quasi-spiritual, this being to develop, for all the home's members, an environment secure in unconditional acceptance and love. The spiritual preconditions of giftedness are not quantifiable and, perhaps partly for this reason, in western educational contexts are under-researched.

Unconditional acceptance presupposes and anticipates a measure of aberrant behaviour – the behaviour, perhaps, of Jesus Christ, at the age of 12, leaving the family caravan and subverting the Temple School in Jerusalem. The manner in which, and the degree to which, the behaviour and goals of the profiled students in Stage 5 of *Talent in the New Millennium*, May-September 2002, were governed by external stimuli, therefore, must give cause for thought. Theories of giftedness tell us that the gifted are characterised by an internal locus of control (Clark, 1997, pp.58,143). However, they tell us, also, that the gifted are culturally conditioned, translating gift into talent, Gagné-wise, in terms meaningful for the social milieu wherein they move. Perhaps *Talent in the New Millennium*'s case study profiles simply showed this mechanism at work. Asked about their short and long-term goals and their most valued achievements, most of the responding students specified academic or sporting targets which they had attained or hoped to attain, targets which were fully predictable in relation to the norms and values of contemporary New Zealand society. Two participants in the final case studies overtly stated that their long-term goal was to be rich, and both itemised precisely the steps they intended to take in the quest. Nevertheless, I remain

uneasy about the extent to which our gifted young, seemingly, set their goals according to the evaluative norms of the society wherein they operate. Certainly, socialisation must feature as an important goal of education. However, are our education procedures so wedded to convention that the gifted, in our care, simply learn to do the socially obvious, but on a larger scale, to a higher level or more efficiently? Easily the most moving response from any student engaged in *Talent in the New Millennium* came from a primary school girl whose evaluative compass steered her to be true to herself. She rated her most significant achievement of the past twelve months as being "my treasure poem". Her reason? "I used my best language. It came from the heart."

CONCLUSION

The findings of *Talent in the New Millennium* have suggested both that much is being achieved for gifted children and students in New Zealand early childhood education centres and schools, and that much remains to be done. Traditionally neglected in a land with a long tradition of egalitarianism, giftedness now is on the New Zealand schools' agenda. Ministry of Education initiatives, commencing in the Year 2000, have given giftedness a sustained profile, which it has never before enjoyed in the story of education in New Zealand.

Research, at this stage of the development of gifted education in New Zealand, inevitably raises questions rather than providing answers. It shows that issues of definition and identification, with regard to giftedness, need further resolution. Socio-economic and ethnic differences, which at present levels of awareness, cloud rather than elucidate the identification of giftedness, remain to be bridged. Schools, increasingly aware of their obligations to the gifted, are stretched for resources. Pre-service teacher education, however, has yet to integrate the dimension of giftedness, effectively, into its programs. Established teachers, meanwhile, call for in-service support. They work in situations where the vertical and lateral, and educational and community, networks crucial to effective functioning in the servicing of giftedness, as yet, are in embryonic stages of development. The role of the early childhood sector in gifted education, particularly, requires address. Above all, perhaps, practitioners in the area of giftedness today face an evaluative and ethical challenge. New Zealand's young gifted grow up in an environment wherein accountability and administratively-driven demands for quantified outcomes externalise the locus of control, fostering neatly packaged conformity at the expense of the intangibles of reflection and spirituality, and the seditious untidiness of original thought. In this environment, the young gifted need encouragement, whether in school or home, to grow up true to themselves, in the freedom to translate giftedness into talent, in terms that "[come] from the heart".

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