

FOCUS: Extending Gifted and Talented Students: USA Experiences

Principal Sabbatical Report for Term 2, 2006 To Ministry of Education and Aquinas College Staff and Board of Trustees

Brendan Schollum, September 2006.

Acknowledgement

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Purpose

To explore two models of effective extension for Gifted and Talented Education (GATE) students

Rationale for Sabbatical

New Zealand has many Gifted and Talented (GATE) students – proportionally as many if not more than other countries. Speaker after speaker in any Conference relating to the future of this country talks about the importance of having students with the intellectual capital, the adaptive strategies, the right attitude and attitudes, and leadership skills to be true leaders and developers in society. As well I believe we need ethical leaders.

Are we catering effectively for our most able students? What experiences are the most effective particularly at years 7-10? What is being done in and outside of class to extend our GATE students? What evidence do we have that particular experiences or programmes pays off later on? These are big research questions.

There are two models for catering for GATE students and I was keen to explore the first of these (below) in more detail

Model 1 Schools with a philosophy of extension within normal classes:

What is being done and why?

What evidence do we have that particular experiences or programmes helps in the senior school, or ultimately as citizens in the tertiary sector or workplace?

Model 2 Schools with a philosophy of extension by formulating special classes or programmes:

What is being done and why?

What evidence do we have that particular experiences or programmes on helps in the senior school, or ultimately as citizens in the tertiary sector or workplace?

VISITS (NB All costs in NZ \$)

1. University of Connecticut National Research Centre on the Gifted and Talented

The work of The National Research Center on the Gifted and Talented (NRC/GT) is guided by emerging research about the broadened conception of human potential and the need to develop "high-end learning" opportunities for all of America's students. Programs and services designed to challenge the highest levels of learning and creativity; to promote high expectations, rigorous standards, and greater engagement with subject matter should be an integral part of every school's overall programme.

The National Research Center on the Gifted and Talented is funded by the Jacob K. Javits Gifted and Talented Students Education Act. It is a nationwide cooperative of researchers, practitioners, policy makers, and other persons and groups that have a stake in developing the performance and potentials of young people from preschool through postsecondary levels. The NRC/GT consortium consists of:

- 3 Core Research-I Universities (University of Connecticut, University of Virginia, and Yale University)
- Over 360 Collaborative School Districts representing every state and two territories (Guam and U.S. Virgin Islands)
- Content Area Consultant Bank that consists of over 165 researchers throughout the United States and Canada
- 20 Senior Scholars at Collaborating Universities
- 52 State and Territorial Departments of Education

I had read about this Centre and organised 2 visits. I met with Directors Profs Joe Renzulli and Sally Reis plus 4 other staff. They are currently involved in a major project teaching Algebra at Grade 6 level to Grade 4 students (cross section of socio-economic backgrounds, after school in 20 x 90 min sessions). Also involved in major mentoring project for gifted students. Also valuable resource, the School wide Enrichment Model Reading Framework was given to me, emphasising creative thinking. The major help was a magnificent comprehensive website they have developed for Gifted Students at www.renzullilearning.com at annual subscription of \$50 per student. Strongly recommended for our gifted students. Researched over 30 years, this Renzulli Learning System is an advanced computer profile and super search engine that matches how students learn to thousands of enrichment activities. Also many valuable resources available through this centre, as well as some given to us. Note that it is Renzulli's model of Giftedness (see Appendix) that has been adopted by the Min Ed in NZ.

2 University of Yale with Dr Linda Jarvin, from the Centre for the Psychology of Abilities, Competencies and Expertise (PACE), and 2 staff. We talked about item development for identifying gifted students, and Sternberg's theory of successful intelligence, integrating the internal world

of individuals, their experiences and their external worlds. I was given a variety of assessment items.

- 3 **School A, San Francisco** (inner city co-educational catholic High School in affluent community) with Ken Hogarty Principal, Julia Rinaldi, Service Learning Coordinator, and Joan O'Neill i/c Gifted Students. Joan explained how Advanced Placement (AP) students study College level courses works at High School, and organisation of gifted students Honours classes. Julia showed her organisation for service trips to Indian communities, Montana (about 12 students per annum) or to Tijuana Mexico. Service Training workshop for staff, and Service opportunities for all students at 4 levels (Freshman, Sophomores, Juniors, Seniors). Very helpful. School very pressed for space – no grass. They recently bought an old building near school on 900 m² site for \$8m
- 4 **School B, Los Angeles** (suburban co-educational relatively new school with 1200 students in affluent community) with Br Lawrence, Principal and 4 staff. The school is very committed to International Baccalaureate programme (introduced because neighbouring schools had it and SMHS was losing students to these schools). Set up costs \$110k, annual costs about \$14k, and cost to each student (Junior/Senior) about \$2500, for extra tuition and examination. School B has about 300 students in IB and as many students in AP courses. This requires enormous organisation and staffing. In their Freshman and Sophomore levels (Years 10 and 11) there is some streaming in languages and Mathematics. School B had comprehensive Christian Service programme at all 4 levels, involving Pre-reflection and Preparation, Service, and Post-reflection. Excellent rationale and organisation.
- 5 **School C, Indianapolis**, a suburban co-educational North Deanery school serving 9 parishes, with mixed income communities (about a Decile 4-6 school!) I met Al Holok Principal, James Kedra Director of Academics, and Mary Schaffner Director of Campus Ministry. I was most impressed with this school – built in tight constrained campus, but with a great spirit and working hard to be judged as one of top 50 schools in the nation. Therefore very good results, participation and service/community work. Staff working coherently to improve and deliver. I was given comprehensive Student Parent Handbook (that had 39 pages of information, policies, procedures then names, address and contacts for all 840 students and parents. I received Draft of a Major Summa Cum Laude extension programme, that the school is drafting for the advanced college bound students. This programme had 11 requirements that had academic, service, retreat attendance and extracurricular involvement and/or achievement.
- 6 **School D, Storrs Connecticut**. state school of 1800 students with 115 teaching staff, 24 teacher aides, 15 counsellors and 44 support staff. The main feature the Principal described was the senior project which comprises 4 components: research abstract, presentation, discussion of a product/activity and an approved community connection, and the

reflection. Each senior student links to a staff member (about 3-4 students per staff member, including the principal). I received a booklet containing the organisation and many examples of projects (eg analyse American Indian Artwork, examine Safety measures needed in racing cars, organic farming, cloning in livestock breeding). One motivated girl had written and directed a play (of 40 minutes – she spent about 500 hours on this project, and her mother thought this was the key reason she was accepted into the country's top Drama College.

- 7 **School E, in Danvers, Boston**, a boys' school of 1200 students, started by Xaverian Brothers in 1907,. This school has high fees, but also enables a range of students from poorer areas of Northern Boston to attend. High expectations and high participation. Many opportunities for AP. Major fundraising and refurbishment occurring, eg \$8m Library.

Some Observations

- Schools' staffed more generously than NZ
- All 5 schools visited identify gifted students and select them into accelerated classes, or by offering College level courses at our equivalent of Years 12 and 13.
- Some excellent examples of more open-ended relevant cross-curriculum investigations taking place; eg one group of cross grade middle school students were identifying, archiving and preserving documents from the 1800s that were found in a suitcase belonging to the first pharmacist in Deadwood, South Dakota. Another group converted the archives into digital format and making the students' research available on a Web site.
- Valuable ICT support is now available in the US for gifted students.
- A range of summer schools are available for gifted students in the US; eg Centre of Talented Youth, Johns Hopkins University, Baltimore (\$2700 for several weeks).
- Some schools were grouping their most able students in certain subjects (Honours classes) in the first 2 levels of high schooling.

Strategies for catering for GATE students

- A. Compacting the Curriculum (from Dr Joe Renzulli) includes these steps:
- Identify the learning objectives or standards all students must learn
 - Offer a pretest opportunity to volunteers who think they may have already mastered the content
 - Plan and offer curriculum extensions for those who are successful with the compacting opportunities

(from Winebenner,P32)

- B. Flexible grouping – grouping students by interest, achievement level, activity preference, or special needs. (from Winebrenner, P32)
- C. Provide the most difficult exercise first. Set out work to be covered, then provide most difficult exercise first as an alternative strategy, with accuracy required (eg 90%). This raises the motivation of GATE students. Have Extension exercises ready if students are successful.

Recommendations

- 1 Students be given more opportunities for Advanced Placement (Courses from Universities offered to High School students) An obvious example is for our Yr 13 students to do Theology papers from Otago University.
- 2 Aquinas College should develop an Honours programme and criteria that could be separated into Academic, Special Character, Sporting and Cultural. There is a possibility to develop an integrated programme for the outstanding all rounder (cf the Summa Cum Laude proposal from School C.
- 3 Each Faculty has a GATE liaison person.
- 4 Aquinas College provides support for at least one staff member to attend regional and national GATE conferences.

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Appendix A

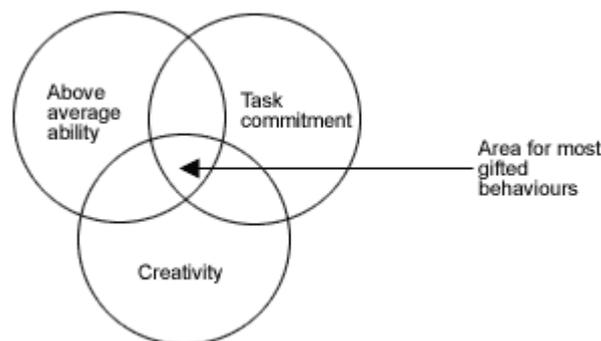
Joseph Renzulli

The Three-Ring Conception of Giftedness.

Renzulli first divides giftedness into two broad categories:-

The first he calls Schoolhouse Giftedness, and characterizes it with great success in test-taking and lesson-learning. Unsurprisingly, individuals who are within this category are those who the identification system readily shows up. He notes, however, that while there should be a very high level of correlation between the IQ scores of this group and their school performance, there is not! The second category he calls Creative-Productive Giftedness. This describes those areas of human activity where a high value is placed on the development of original material and of products designed to suit defined audiences.

Renzulli states that both categories are important and that there is usually interaction between the two. The second category has a number of facets, and these Renzulli has divided into two further categories. One of these he calls Task Commitment, and the other he calls Creativity.



Renzulli argues that some balance of all three areas is needed. Above average ability with creativity is not likely to produce productivity if there is little task commitment. Likewise, above average ability with high task commitment will not lead to new, original or unique concepts or products.

The Three-Ring concept has been developed from this formulation, setting the three areas in the context of performance areas. The General Performance Area covers activities like Mathematics, Science, Languages, Arts, Religion while the Specific Performance Area covers the huge array of specific human activities from film making to cooking or city planning to fashion design.