

Gagné's Differentiated Model of Giftedness and Talent in Australian Education

Peter Merrotsy
The University of Western Australia

Abstract

It is commonly stated that in Australia Gagné's Differentiated Model of Giftedness and Talent is generally referred to, applied, used, or adopted in most contexts related to the education and support of gifted and talented children and youth. To examine the extent to which this claim is true, an analysis was conducted of policy and related documents, as well as websites and grey literature, published or made public by key educational bodies and by associations whose concern is the gifted and/or the talented. The evidence from this analysis shows that in fact at least some of this claim as stated is simply not the case. In particular, it was found that most of those who do refer to Gagné or his Differentiated Model of Giftedness and Talent, with or without a reference, tend to quote, or partially quote, only the definitions of giftedness and of talent, then make little if any further reference to the model itself.

I think that it is fair to say that Australia has a particular appeal for François Gagné, and that many Australian "gifted educators" hold Gagné in very high regard. I would therefore like to say from the outset that this current debate focusing on Gagné's Differentiated Model of Giftedness and Talent (DMGT) and its place in Australian education might not be possible except for the fact that several years ago I rescued Gagné from being attacked by a large male kangaroo. Perhaps Gagné would suggest that I rescued the kangaroo!

And it has come to pass that it is indeed commonly asserted that in Australia Gagné's DMGT "provides the most generally accepted definition of both giftedness and talent" (Australian Curriculum Assessment and Reporting Authority, n.d., ¶2), or assumed that the DMGT has been widely adopted "as the basis for program and policy development" (State Government Victoria, Department of Education and Early Childhood Development, p. 8). It has even been claimed that "François Gagné's

Developmental Model of Giftedness and Talent ... is the main theory of talent development applied to gifted education across all states and territories in Australia [sic, on four counts]" (Kronberg, cited in GERRIC, 2016, p. 2).

Before exploring the extent to which these various assertions may or may not be true, let us remind ourselves of the key elements of Gagné's (1985, 1991, 2004, 2008, 2009a, 2009b, 2012a, 2013) DMGT.

- Gagné distinguishes or differentiates natural abilities or aptitudes, and systematically developed abilities or skills.
- Giftedness refers to the possession of outstanding natural abilities or aptitudes (indicated in the model as gifts) in at least one domain of human natural abilities (the DMGT 2.0 lists six mental and physical domains).
- Talent refers to the outstanding mastery of systematically developed abilities or competencies, comprising knowledge and skills, in at least one field of human endeavour (the DMGT 2.0 lists nine fields).
- Gifts are developed into talent through a talent development process, that is, the systematic, deliberate, ongoing and progressive application of the individual child or youth or young adult to a structured program of activities in order to achieve a specific excellence goal.
- Intrapersonal and environmental catalysts impact, positively or negatively, on the talent development process. The two sets of catalysts are not mutually exclusive, and they do influence one another - in particular, the intrapersonal catalysts will serve as an important filter for the environmental catalysts.

- Chance is an important component of the DMGT, and represents the degree of control that the individual has over the other components of the DMGT.

The DMGT as it is expressed here does need some clarification.

First, Gagné (1998a, 1998b, 2004, 2008, 2011, 2013) has provided in his definitions of giftedness and talent a precise estimate of prevalence: gifted and talented individuals occupy the top 10% in measures of ability and performance. Second, Gagné (1998a) noted that, if abilities are not too closely related, the percentage of those who are measured to be either gifted or talented (or both) in at least one domain or field will increase as the number of domains and fields measured is increased. He concluded “it is not unreasonable to expect that close to two thirds (60-65%) of students could be labeled gifted or talented in regular classrooms” (p. 123).

Third, Gagné (1998b) has proposed a system of levels of giftedness. Even though there is debate about this system (for example, see Gross, 2009), at the very least Gagné’s proposal does have ramifications for the extent or radicalness of educational intervention or provision for gifted students and for talented students.

Fourth, Gagné (2008) has insisted that “natural abilities are NOT innate; they do develop over the whole course of a person’s life” (p. 3, emphasis in original). This issue has been the centre of a lot of misunderstanding related to the DMGT, and the cause of much consternation and gnashing of teeth (see, in particular, Gagné, 2009b, 2013).

Fifth, Gagné (2010) has highlighted the way in which the concept of motivation is central for the intrapersonal catalysts. This goal management dimension of Gagné’s DMGT describes how students who are participating in a systematic talent development program define their excellence goals, and how they work to reach them. The distinction between goals and motives, and the dynamic between motivation and volition, are important precisely because of their relationship to self regulation and goal management.

Sixth, Gagné (2013) has emphasised the “developmental” nature of talent development by integrating a “Developmental Model for Natural Abilities” and the DMGT to create an “Expanded Model of Talent Development ... that begins with the biological foundations and ends with high level expertise” (p. 5). Gagné (2012b,

para. 4) also calls this the “Comprehensive Model of Giftedness and Talent”.

Seventh, the notion that the DMGT is a developmental model or theory needs to be borne in mind when interpreting the whole of the DMGT model. Components of the model cannot be separated out and considered on their own: the components of the model are inter-related, and there are in-built feedback mechanisms, all making the DMGT quite a dynamic structure for educational practice.

Eighth, as a developmental model or theory, the DMGT naturally brings with it certain responsibilities for teachers, schools and systems that adopt it as a framework for their educational practice. For example, Gagné (2015) has proposed “seven constitutive characteristics of exemplary talent development programs” (p. 281) that distinguish appropriate talent development from inadequate provisions. These comprise: “an enriched K-12 curriculum; systematic daily enrichment; full-time ability grouping; customized [and] accelerated pacing; personal excellence goals; highly selective access; early interventions” (Gagné, 2015, p. 287; cf. Gagné, 2011, p. 12).

Ninth, Gagné (2011) also argued that, “if most gifted programs [sic] were reoriented to follow the DMGT’s Academic Talent Development model, the equity issue [that exists in our field] would lose its relevance” (p. 3).

In the following sections, I explore the extent to which Gagné’s DMGT has been embraced by those involved in various ways with the education and support of gifted and talented children and youth in Australia. To achieve this aim, an examination was conducted of a broad range of documents: current policy and related documents; previous versions of policy when these were accessible; websites; and grey literature. These documents have been published or made publicly available by key national, state and territory bodies related to the education or to the support of the gifted and talented, including: national, state and territory departments of education; national, state and territory curriculum authorities; national, state and territory systems of education (Public, Independent, and Catholic); national teacher bodies; and national, state and territory associations. In particular, the literature was analysed with respect to the extent to which it referred to, understood and applied the DMGT, including: its definitions of giftedness and talent; its other components; the entirety of the model; and Gagné’s elaborations of the model. Consideration was also given, when appropriate,

to identification (for example, measuring high achievement is very different from identifying high potential); to special provision (for example, as an indication of investment in a talent development process); and to catalysts (for example, catalysts can have a negative impact on talent development).

The national perspective is considered first, followed by the perspectives from the states and territories presented in alphabetical order.

National Policy and Practice

An internet search of the Australian education policy literature, including the government grey literature, revealed only one mention of education specifically related to gifted and talented children, or at least using the terms gifts and talents. It is found in a document called *The Melbourne Declaration*, and note the use of the words “all” and “every” with respect to students:

Australian governments, in collaboration with all school sectors, commit to promoting equity and excellence in Australian schooling.

This means that all Australian governments and all school sectors must ... promote a culture of excellence in all schools, by supporting them to provide challenging, and stimulating learning experiences and explore and build on their gifts and talents. ...

Excellent teachers [nurture] the unique talents of every student. (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008, pp. 7 & 11)

Otherwise, there is no Australian federal legislation, policy or funding specifically for the education of gifted and talented students. The term “gifted education” or similar is not acknowledged in any federal government document. There is no national institution for the education of gifted and talented students. There is no national target with respect to the education of gifted and talented students. Equivocally, however, the Australian Bureau of Statistics has included “gifted education” in “special education” for research reporting purposes (Australian Bureau of Statistics, 2001, #070113; Forlin & Forlin, 2000).

The Australian Curriculum

The Australian Curriculum Assessment and Reporting Authority (ACARA) is responsible for the development of The Australian Curriculum, a national curriculum from Kindergarten to Year 12 in specified learning areas. A National Assessment Program - Literacy and Numeracy (NAPLAN) for Years 3, 5, 7 and 9 is aligned to the Australian Curriculum and measures student progress, or at least the extent to which school students are meeting important educational outcomes with respect to minimum benchmarks.

Several pages of the ACARA website (Australian Curriculum Assessment and Reporting Authority, n.d.) have provided “advice ... on how teachers use the flexible design of the Australian Curriculum to meet the individual learning needs of gifted and talented students” (para. 1). Gagné’s (2008) DMGT is but one of three “models of giftedness” outlined: brief definitions of giftedness and talent are accompanied by the statement, “talent emerges from giftedness through a complex developmental process and via a number of influences, including the teaching and learning opportunities” (Australian Curriculum Assessment and Reporting Authority, n.d., para.2).

The Australian Institute for Teaching and School Leadership (AITSL)

AITSL is responsible for the accreditation of initial teacher education programs at institutes for the education of teachers (university faculties and schools of education). The national professional standards describe the attributes of graduate, proficient, highly accomplished and lead teachers. Nowhere in the AITSL documents is there to be found mention of terms such as gifted, talented, high ability, and so on. The nearest the national professional standards documents come to dealing with the education of gifted students is with respect to the full range of abilities, and challenging learning goals (Australian Institute for Teaching and School Leadership, 2012):

Differentiate teaching to meet the specific learning needs of students across the full range of abilities. *Graduate* Demonstrate knowledge and understanding of strategies for differentiating teaching ... (Standard 1.5)

Establish challenging learning goals. *Graduate* Set learning goals that provide achievable challenges for students of

varying abilities and characteristics.
(Standard 3.1)

Australian Education Union (AEU)

Just over a quarter of a century ago, an Australian teacher union president proclaimed, “We’re not ‘anti’ the gifted - just the allocation of resources to them” (Foggo, cited in Boag, 1990, p. 49). This attitude was subsequently confirmed in AEU policy: “The AEU opposes the withdrawal of so-called ‘gifted’ children and the use of accelerated progression. ... The full extension of all students should take place through increased individual attention in the normal classroom” (Australian Education Union, 1993, p. 21, Section 12.6-7.). This policy was reiterated by Fitzgerald and Durbridge (2001), and supported by “considerable evidence” (p. 6) comprising one journal article (Craven, Marsh & Print, 2000). A thorough internet search failed to find any further statements by the AEU about the education of gifted and talented students.

The Australian Association for the Education of the Gifted and Talented (AAEGT)

The AAEGT is a national body providing “a focus for the endeavours of Australian teachers and parents in the field of gifted education” (Australian Association for the Education of the Gifted and Talented, n.d., About AAEGT, para.1). The terms “gifted” and “gifted and talented” are used throughout their website, either as adjectives or nouns, and without clarification. No reference or information is provided on the website about Gagné’s DMGT.

The States and Territories

In each state and territory, a board of studies or curriculum authority is responsible for the development of syllabuses, external examinations, and ensuring that all schools follow approved syllabuses. Each state and territory department of education is responsible for the delivery components of public school education. Independent schools and Catholic systemic schools are represented in each state and territory, and boast enrolments of approximately 35% of the student population. Their representative peak body is the Independent Schools Council of Australia, whose website (<http://isca.edu.au/>) contains no information about the education of gifted and talented students. Some regional Catholic school systems have made their “gifted education policy” publicly available. Each state and

territory has at least one association whose concern is for “gifted children”, or “gifted and talented children”, or “the field of gifted education

Australian Capital Territory (ACT)

The ACT Education Directorate has stated that the DMGT “informs the key educational approaches and definitions contained in [the Gifted and Talented Students] Policy” (ACT Government: Education and Training, 2014, p. 2, section 2.3). Definitions of giftedness and talent have been provided, but with mention of neither prevalence nor levels of giftedness (sections 3.11, 3.14). The 2008 policy referred to Gagné (2008), but the citation for this reference is not included, and used the term innate abilities instead of natural abilities (ACT Government: Education and Training, 2008). The 2014 policy does not provide any references, and while it does use the term “outstanding natural abilities or aptitudes” (ACT Government: Education and Training, 2014, p. 3, section 3.11), it also uses the term “innate or natural abilities” (p. 3, section 3.9), which is reinforced on the policy website page by the use of the term “generic abilities” (ACT Government: Education and Training, 2016, para. 1).

The ACT Education Directorate has also stated that the DMGT “provides research-based definitions of giftedness and talent that have a logical connection to identification and curriculum programs” (ACT Government: Education and Training, 2014, p. 3, section 3.9 - this is almost a direct quote, lifted without acknowledgement from Australian Curriculum Assessment and Reporting Authority, n.d.). However, no special provision is made in the ACT public education system for the education of gifted and talented students. Rather, this “logical connection” is taken to mean that responsibility for the education of gifted and talented students is clearly placed within the local school community, and specifically with the Principal. Indeed, the responsibilities of the Principal are specifically referred to in six of the ten items of the policy statement, and further referred to in a “GAT” flowchart, “Principal determines gifted and talented status of student, based on the evidence provided” (p. 6, Appendix A). Other policy items refer to identification, a case management approach, Individual Educational Programs (IEPs), and transition arrangements.

On a Parent Fact Sheet (sic) (ACT Education Directorate, n.d.), it is stated that the policy is “based” on the DMGT (p. 1), and the definitions

of giftedness and talent (with prevalence of 10%) are included in a boxed section. Attention is drawn to “the catalysts” (p. 1, underlined in the original), but the only catalyst mentioned is the family.

An ACT association does exist, which may or may not be affiliated with the NSWAGTC. However, I found six different names for this group (ACT Gifted, ACT Gifted and Talented Local Support Group, ACT Gifted Support Group, ACT Gifted Families Support Group, ACT Gifted Families Support Group Inc., and ACT Gifted Families Support Group Association Inc.), which is somewhat confusing. A website (<http://www.actgifted.net.au/actgt/>), which was active in January 2017 but not in May 2017, provided a link to the “ACT Department of Education Gifted and Talented Policy [sic]” webpage; no reference or information was provided on the website about Gagné’s DMGT, and no other conception of giftedness and/or of talent was referred to.

New South Wales

In 1991, the New South Wales Government released its policy for the education of gifted and talented students. The terms “gifted” and “talented” were applied to students “with the potential to exhibit superior performance across a range of areas of endeavour” and “in one area of endeavour” respectively (New South Wales Department of School Education, 1991, p. 3). Accompanying the policy and strategy documents to schools came a handbook from the New South Wales Board of Studies (1991) setting out guidelines for accelerated progression. Interestingly, the New South Wales Government policy definition was translated by the New South Wales Board of Studies (1991, p. 3) into the “more precise definition” of Gagné’s DMGT. A thorough and well-researched revision of these guidelines was released six years later (New South Wales Board of Studies, 1997). This time, Gagné’s distinction between potential and performance was unambiguously presented, and an important section, on flexible progression and suggestions for organisational change, was placed more prominently within the document. For a detailed narrative of how these events unfolded, see Merrotsky (2003).

In 2004, the New South Wales Government published their “Gifted and Talented Policy [sic]” (Reference No. PD/2004/0051/V03), calling it a “revision” of the 1991 policy. The policy was accompanied by two support documents: policy implementation strategies

(New South Wales Department of Education and Training, 2004a); and a discussion paper on extension programs and other options (NSW Department of Education and Training, 2004b). The policy adopted definitions of the terms giftedness and talent “based on” Gagné’s (2003) version of the DMGT. “Gifted students are those whose potential is distinctly above average”, and “talented students are those whose skills are distinctly above average” (New South Wales Department of Education and Training, 2004a, p. 6). There is no mention of prevalence; levels of giftedness, catalysts and the talent development process are only touched on. In 2006, the policy became mandatory. Research conducted by Merrotsky (2009) strongly indicated that a high proportion of New South Wales public schools had, by then, not implemented this mandatory policy. He found that most schools did not know that there was a state level policy, or still quoted the 1991 version of the policy, or knew that there was a policy but did not know what was in it or how to locate it.

In the “discussion paper” (New South Wales Department of Education and Training, 2004b), the government’s approach to maximising the learning outcomes for gifted students in all public schools was set clearly within the philosophy of inclusive education. The appropriate response, once gifted (and presumably also talented) students have been identified, is to provide “extension programs” for them. You may well ask, as the discussion paper did, “What is an extension program?” The crux of the answer was “Curriculum differentiation.” The 1956 version of Bloom’s taxonomy is cited as a model of curriculum differentiation.

In New South Wales, there is a broad range of systemic provisions for gifted and talented students: primary schools with Opportunity Classes (OC); selective agricultural high schools; partially selective high schools; high schools for the creative and performing arts; a Conservatorium of Music high school; a virtual selective high school; and fully selective high schools, which cater for high achieving, “academically gifted students”, i.e., academically talented students in Gagné’s sense of the term (NSW Department of Education, n.d., para. 1).

In 1991, the New South Wales Board of Studies proposed that gifted students be supported to gain access to a range of tertiary courses while still at school. It took only twenty years or so for curriculum, delivery, credentials and credit transfer to be negotiated with various

stakeholders, and resulted in the program “HSC-University pathways for talented students” (NSW Education Standards Authority, 2016, para.1).

It is worth drawing attention here to the Sydney Catholic Schools (2015) “gifted education policy [sic]”. This policy “adopts Gagné’s [2010] definitions of giftedness and talent” (section 2.0) and clearly states that “schools have a responsibility to adopt the underlying principles of giftedness and talent based on Gagné’s (2010) [DMGT v. 2.0]” (section 2.1) and to apply them. Although it does not refer to levels of giftedness, catalysts or the talent development process, some of the ramifications of these “underlying principles” are detailed.

Apparently, the NSW Association for Gifted and Talented Children (NSWAGTC) used to be “for parents, educators and others concerned with gifted children”, or at least this used to be stated on the homepage of their website (<http://www.nswagtc.org.au/>), which now seems suspiciously to seek donations and to advertise tattoos. Personal communications from four individuals (names withheld on request) have reported troubles within the NSWAGTC that led to an acrimonious splitting of this association. Personal experience suggests that the political damage and ramifications arising from these events have been significant and widespread. Alternatively, the “Gifted Families Support Group [sic]” (<http://www.gfsg.org.au/>) aims to support gifted children, their families and educators, and provides a voice at the AAEGT and boasts affiliation with Gifted with a Learning Difficulty (GLD) Australia, although it is not made clear what this second entity is.

Northern Territory

In 2006, the Northern Territory Government released a “revised” policy for the education of gifted students in the Northern Territory (Northern Territory Government, Department of Education and Training, 2006a). Without appropriate acknowledgement of doing so, this policy adopted aspects of Gagné’s (2003) version of the DMGT. There are definitions of giftedness and talent, and a mention of talent emerging from a developmental process that is influenced by environmental and personality factors (p. 2). While there is no mention of prevalence or of levels of giftedness, the policy does carefully stress that the Northern Territory is “a multicultural society with a wide range of ethnic groups, including a large indigenous population ... [and that] giftedness is evidenced in all groups of our society” (p. 2), with special attention given

to the different ways in which giftedness may be demonstrated. However, the policy then mixes the language about “natural” and “innate” abilities (p. 2), and then proceeds to drop the distinction between “gifted” and “talented” (p. 3).

The policy is supported by a document titled *Gifted Education Guidelines* (Northern Territory Government, Department of Education and Training, 2006b). Here, responsibility for the identification and education of “gifted” students is deferred to the school level (p. 4), which is followed by approximately 140 pages of checklists and forms for school use. Prime responsibility of schools is reinforced in recent documentation (Northern Territory Government, Department of Education, 2016), which refers, with typographical and syntactical errors, to Gagné’s (2008) DMGT using the terms “outstanding potential (gifted) [and] high level performers (talented)” (p. 1). When speaking of “giftedness from an Australian Aboriginal perspective” (pp. 1-2), however, the language slips back to the notion of “intellectual strength innate in their worldviews” (p. 1), with an apparent focus on the so-called multiple intelligences including naturalist and spiritual intelligences (p. 2).

In the Northern Territory, no special provision is made at a systemic level for the education of gifted and talented students. An independent school, The Essington International Senior College, Charles Darwin University, provides a high-level academic program of international study, work experience, community service, and transition to university. The territory association is the Northern Territory Association for the Education of the Gifted and Talented (<http://www.ntaegt.org.au/>). Its website refers to “children and adolescents who have high intellectual potential or talents”, but mainly uses the term “gifted child”. No reference or information is provided on the website about Gagné’s DMGT.

Queensland

In a very poorly referenced document, and in answer to the question “Who are the gifted?” the Queensland Government Department of Education, Training and the Arts (n.d.) policy states, “Students who are gifted excel, or are capable of excelling, in one or more areas such as general intelligence, specific academic studies, visual and performing arts, physical ability, creative thinking, interpersonal and intrapersonal skills” (p. 2). The policy recommends the Saylor Gifted and Talented

Checklist for Teachers (with a secondary citation) as the primary tool to identify giftedness, accompanied by the statement that it is a useful tool “to initiate dialogue between teachers and parents” (p. 2, footnote). The full “framework for gifted education” includes quite dated guidelines for acceleration, and is supported by resources intended to meet the learning needs of students who are gifted (available at www.learningplace.com.au/en/g&tt).

An extensive review of the policy by Freebody, Watters and Lummis (n.d. - presumably conducted post 2010, but the dates in the references cited are rather unusual) found that, although schools were “required” to implement the Queensland “policy for the education of students who are gifted”, this was commonly understood by schools to be a “suggestion”, and that failure to act on the suggestion in an accountable way has few if any consequences (p. 71).

An interesting and apparently successful systemic provision in Queensland is made through three Queensland Academies: Creative Industries, Health Sciences, and Science, Mathematics and Technology (State of Queensland, Department of Education and Training, 2016). The Academies are state schools for high ability students Years 10-12 that offer the International Baccalaureate (IB) Diploma Program and preparation for university studies. An evaluation of their effectiveness provided a glowing report concerning the strong outcomes for students and the excellence of the program, and commented on the uniqueness of the model and the high quality of teaching and educational leadership (Harreveld & Caldwell, 2010).

The state association is The Queensland Association for Gifted and Talented Children (<http://www.qagtc.org.au/>). Without further elaboration, they refer to gifted and talented children who possess exceptional abilities. No reference or information is provided on the website about Gagné’s DMGT.

South Australia

The Government of South Australia, Department for Education and Child Development (2012) policy document states that it is “based on Gagné’s definition of giftedness and talent [sic]” (p. 3). Discussion of Gagné’s (2003) version of the DMGT is relegated to an appendix, where the terms “natural” and “innate” abilities are mixed up (p. 13). In this appendix there is reference to prevalence, an oblique mention of “factors” that

would equate to some of Gagné’s catalysts, and only a fleeting statement about “the development of giftedness into talent” (p. 13).

Special systemic provision for “gifted students” in South Australia is made in two ways: the Ignite Program, implemented in three high schools and providing accelerated learning (p. 10); and a broad range of “special interest schools” (p. 11), for which only some in fact require special entry enrolment. Curriculum support material for professional learning focuses on the 1956 version of Bloom’s taxonomy, and Gardner’s so-called multiple intelligences (e.g., Government of South Australia, Department for Education and Child Development, n.d.). An updated version of the policy (Government of South Australia, Department for Education and Child Development, 2016), which manages but once to spell Gagné’s name correctly, notes that the policy “is mandatory and staff are required to adhere to the content” (p. 1).

The state association is the Gifted and Talented Children’s Association of South Australia (gtcasa.asn.au). Apart from the term “smart kids” appearing on the website banner, there is no indication about to what or to whom the term “gifted and talented children” refers. No reference or information is provided on the website about Gagné’s DMGT.

Tasmania

The Tasmanian Government Department of Education appears to have no policy, or at least no published policy document, on the education of gifted and talented students. The Department of Education Tasmania website (<https://www.education.tas.gov.au>) provides access to a range of documents concerning “gifted students”, some of which have restricted access. In a general curriculum document, it is stated that “schools must adhere to the relevant procedures in relation to educating gifted and talented students” (Department of Education [Tasmania], n.d., p. 3), where “must” is to be understood as mandatory. However, in the document Tasmanian Government Department of Education (n.d.), the procedures related to the education of gifted students “are to be construed as being directory”, i.e. not mandatory (p. 3). Here, definitions of “gifted students” and “talent” “draw on the DMGT” (p. 2), although it is not clear which version is referred to and no reference is cited. Here, there is one mention of prevalence (with respect to giftedness); there is no further reference to Gagné or to the DMGT. Other documents include a checklist for parents, and, interestingly, cross-

sectorial guidelines for early entry to Kindergarten.

The state association is The Tasmanian Association for the Gifted (<https://www.tasgifted.com/>). The term “gifted” is used throughout the website, but not the term “talented”. A link to “gifted policy” gives access to the Tasmanian Government Department of Education documents discussed above. No reference or information is provided on the website about Gagné’s DMGT.

Victoria

The Victorian Department of Education and Early Childhood Development appears to have no current published policy on the education of gifted and talented students. A previous policy, titled *Bright Futures* (Directorate of School Education, Victoria, 1995), was extant from 1995 until 2001, after which it seems to have been superseded first by “information on gifted education”, and then by a singular “strategy for gifted and talented children and young people [sic]” (State Government Victoria, Department of Education and Early Childhood Development, p. 1). However, this strategy “relates primarily to early childhood settings” (p. 6). The strategy “adopts the widely accepted definition of giftedness and talent [sic] proposed by [Gagné] in which ‘giftedness’ is understood as outstanding potential and ‘talent’ as outstanding performance” (p. 8). There is mention of prevalence and levels of giftedness, even though these do differ from the cited Gagné source, but not of talent; and there is mention too of the important role of environment, personality, motivation and persistence in the transformation of gifts into talents, albeit without specific mention of catalysts and a talent development process.

Special systemic provision in Victoria is made by way of the Select Entry Accelerated Learning (SEAL) Program, four specialist secondary schools, and four selective entry high schools.

The state association is the Victorian Association for Gifted and Talented Children (VAGTC). One out-of-date website stated that their “primary interest [is] the welfare of gifted and talented children” (<http://www.vagtc.asn.au/>). In January 2017, another website included terms such as “developing gifted potential” and a reference to “the top 2%”, and stated that “The sole purpose of the VAGTC is to support gifted and talented children in Victoria to achieve their true potential by actively advocating on their behalf [sic].” This website now states that the

VAGTC “advocates for the identification and support of gifted and talented children in schools across the state of Victoria”. (Victorian Association for Gifted and Talented Children, 2017, Home page). No reference or information is provided on the website about Gagné’s DMGT.

Western Australia

The mandatory policy of the Government of Western Australia, Department of Education (2010) essentially adopts Gagné’s definitions of giftedness and talent, from a pre-2001 version of the DMGT (probably Gagné, 1991), but makes no reference to Gagné or to other aspects of the DMGT (in-text references cite a Preferences and a References Committee, 2001). The policy is accompanied by a support document (Government of Western Australia, Department of Education, 2011). Here, the policy definitions of giftedness and talent are repeated, Gagné’s name is spelt incorrectly, and the diagram from Gagné’s (2008) version of the DMGT is reproduced in an Appendix, the source of which is acknowledged only by an obscure reference. There is confused reference to prevalence (is it 5%, or perhaps 10%?), and fleeting mention of “factors in the development of a person’s giftedness into talents” (p. 3), but otherwise no mention of either catalysts or the talent development process. To identify “the gifted and talented student [sic]”, teachers are directed to a checklist that is supported only by a self-reference to the Department of Education Western Australia (1997) (Government of Western Australia, Department of Education, 2011, pp. 17-18). Elsewhere, the teacher can start with curriculum differentiation by using ideas from de Bono, “multiple intelligence [sic]”, and the 1956 version of Bloom’s taxonomy (Government of Western Australia, Department of Education, n.d.a, Teaching and learning models).

Apart from so-called inclusive school-based curriculum, as required by the state’s *Curriculum Framework* (Curriculum Council, Western Australia, 1998), special systemic provision for gifted and talented students is made through: supplementary programs, such as Primary Extension and Challenge (PEAC) programs, and part-time selective academic, arts and languages secondary programs; and selective placement in two fully selective secondary schools, for students who are “gifted and talented” academically and in the creative arts (Government of Western Australia, Department of Education, n.d.b).

There are two state associations. The Gifted and Talented Children's Association of WA has used the adjective "gifted" throughout the association's website (<http://gatcawa.org/>), without clarification as to what this term or the title of the association might refer. Personal experience and personal communication (from too many people to list here) suggest to me that some of the practices and behaviours of the association should be seriously questioned. Gifted WA (<http://www.giftedwa.org.au/>) was established in 2016, and is "dedicated to the balanced development of students of higher cognitive potential." Gifted WA's website provides a link to Gagné's professional website (<http://gagnefrancoys.wixsite.com/dmgt-mddt>).

Discussion

From the overview and analysis of national, state and territory documents and websites related to the education and support of gifted and talented children and youth, I would like to make nine observations.

First, it would be polite and respectful to spell Gagné's name (both surname and given name) correctly, and to give the correct title for Gagné's DMGT.

Second, due acknowledgement of sources is important and it is incumbent on us to provide appropriate references in support of what we write, publish and make publicly available. Non-existent references, lack of references, inappropriate referencing, and poor referencing are simply and utterly not acceptable. The fact that referencing appears to be such a problem for educators and education administrators is appalling, and especially so in a field that describes itself as "gifted education". Schools would expect better referencing from their students in assignment work than what is provided by most of the documents cited above.

Third, language is important. In the literature (including publications, policies, website pages, and grey literature), terms such as "gifted", "talented", "natural", and so on should be made very clear and their use kept consistent throughout each document. The concept "gifted and talented", as noun or adjective, conflates the meaning of the two separate terms; the way this term and its related acronyms are used tends to become clichéd and confused, so that the concept loses any meaning that it might have had. Again, language is important. Much of the poor syntax and poor grammar evident in most of the documents cited above is avoidable, and

reflects poorly on the field of "gifted education".

Fourth, Gagné's definitions of "giftedness" and of "talent" are components of Gagné's DMGT. Adopting these definitions (or indeed the "definition of giftedness and talent") is by no means equivalent to adopting Gagné's DMGT as a framework for educational policy and practice.

Fifth, identification of talent is (relatively) easy. Identification of high potential, however, is a very different matter. At the same time, issues related to prevalence, including prevalence in each domain of giftedness and each field of talent, need to be addressed. Here it should be noted that commonly used behavioural checklists (e.g. the Renzulli Hartman Scales for Rating the Behavioral Characteristics of Superior Students; the Saylor Gifted and Talented Checklist for Teachers) are not well supported by formal research (Merrotsy, 2015, 2017).

Sixth, teachers, and schools, and school systems, and associations are all environmental catalysts that will impact, positively, or negatively, on the talent development process. Internecine disputes, amongst academics and within and between associations, are very damaging to the field of "gifted education", and those most affected are those who are supposed to be the subject of our concern.

Seventh, in most contexts the nature of "talent development" appears to be translated to mean curriculum differentiation in inclusive classrooms, and the most common form of curriculum differentiation applies the 1956 version of Bloom's taxonomy! Here it should be noted that many "inclusive" classrooms can be very excluding of many gifted students (Merrotsy, 2015). At the very least, students involved in talent development programs should be afforded continuity of educational experience, which appears to be assured only within a selective program (or at least for the duration of the program). Again, for well-researched advice on what is really meant by "best practice" in academic talent development programs, see Gagné (2015).

Eighth, with many poorly defined and poorly articulated policies, and with four or five state "mandatory" policies that appear to be struggling to be implemented in at least some their educational contexts, accountability in Australia for the education of gifted and talented students is low, or non-existent.

Ninth, I would argue that an emphasis on the importance of non-intellectual abilities for

minority students, at the expense of intellectual giftedness, is inequitable if not implicitly worse - I would in fact argue that it is racist. Quotas could be considered in this same light. Rather, we should also be appropriately identifying minority students with high intellectual potential, and providing them with learning environments, programs, learning experiences and support to ensure their success at school, so that they may develop and express their high ability and excel in a field of academic endeavour.

Conclusion

From the above discussion I would challenge the widely held assumption that Gagné's DMGT is generally adopted or appropriately used in Australian educational contexts. Many of the documents cited above (including several policy statements and many of the various websites of educational bodies and associations) mention neither Gagné nor the DMGT at all, and do not include any of the substance of the DMGT. To be sure, in policy and related documents, one national body and seven of the eight states and territories do refer to Gagné, and one national body and six of the eight states and territories do refer to Gagné's DMGT. And most of the state and territory departments of education either claim to base their policy on Gagné's DMGT (with or without a reference), or claim to adopt various versions of Gagné's DMGT (again, with or without a reference). However, most in fact cite only part of Gagné's DMGT, or misrepresent it. In particular, most quote, or partially quote, only the definitions of "gifted" and of "talent", or the "definition of giftedness and talent [sic]", then either refer obliquely to other aspects of the DMGT, or do not touch on any other aspect of the model at all. And all too often the policy language related to the DMGT is mangled, and becomes no more than galimatias¹.

Gagné's Differentiated Model of Giftedness and Talent is a dynamic model that provides a robust framework for policy and practice for the education of students who are gifted and students who are talented. Gross (1993, p. 40) has written that "an education system which adopts the Gagné definition [sic - read 'model'] commits itself to identifying high potential in students - real potential, not imagined potential proposed for political reasons! - and creating an educational and social environment which will develop that potential into high performance." I would conclude that we are yet to witness this

adoption, and this commitment, and this creation.

References

- ACT Government: Education and Training. (2008). Gifted and talented students. [Policy GAT200808.] Retrieved from http://www.det.act.gov.au/publications_and_policies/policy_a-z
- ACT Government: Education and Training. (2014). Gifted and talented students policy. [Policy GTS201402.] Retrieved from http://www.education.act.gov.au/teaching_and_learning/gifted-and-talented-education
- ACT Government: Education and Training. (2016). Gifted and talented students. Retrieved from http://www.education.act.gov.au/teaching_and_learning/curriculum_programs/g-and-talented-education
- ACT Education Directorate. (n.d.). Giftedness and talent. [Parent fact sheet.] http://www.det.act.gov.au/__data/assets/pdf_file/0011/587306/Giftedness-and-Talent.pdf
- Australian Association for the Education of the Gifted and Talented. (n.d.). AAEGT - Australian Association for the Education of the Gifted and Talented. Retrieved from <http://www.aegt.net.au/>
- Australian Bureau of Statistics. (2001). 1272.0 - Australian standard classification of education (ASCED). [Updated 2006.] Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/E9F30BEAAE5C937CCA256AAF001FCAA3?opendocument>
- Australian Curriculum Assessment and Reporting Authority. (n.d.). Australian curriculum, v8.3 F-10 curriculum. Student diversity: Gifted and talented students. Retrieved from <http://www.australiancurriculum.edu.au/studentdiversity/gifted-and-talented-students>
- Australian Education Union. (1993). *Policy on curriculum*. [As adapted at the 1993 annual conference.] Southbank, Vic: Author.
- Australian Institute for Teaching and School Leadership. (2012). *Australian professional standards for teachers*. Retrieved from <http://www.aitsl.edu.au/australian-professional-standards-for-teachers/standards/list>
- Boag, C. (1990). Bright, bored and ignored. *Bulletin*, 15 May, 48-54.
- Craven, R. G., Marsh, H. W., & Print, M. (2000). Gifted, streamed and mixed-ability programs for gifted students: Impact on self-concept, motivation, and achievement. *Australian Journal of Education*, 44(1), 51-75.

¹ confused talk, gibberish

- Curriculum Council, Western Australia. (1998). *Curriculum framework for kindergarten to year 12 education in Western Australia*. Perth, WA: Author.
- Department of Education [Tasmania]. (n.d.). Curriculum in Tasmanian schools K-10: procedure. Retrieved from <https://www.education.tas.gov.au/documentcentre/Documents/Curriculum-Procedures-in-Tasmanian-Schools-K-12.pdf>
- Department of Education Western Australia. (1997). *Exceptionally able children: guidelines for early childhood years* (revised edition). East Perth, WA: Author.
- Directorate of School Education, Victoria. (1995). *Bright Futures: Policy statement and policy implementation strategies*. [Gifted students program, quality program division.] Melbourne, Vic: Author.
- Fitzgerald, D., & Durbridge, R. (2001). *A submission by the Australian Education Union to the Senate Employment, Workplace Relations, Small Business and Education References Committee inquiry into the education of gifted and talented children*. Southbank, Vic: Australian Education Union.
- Forlin, C., & Forlin, P. (2000). Special education research in Australia. *Exceptionality*, 8(4), 247-259.
- Freebody, P., Watters, J., & Lummis, S. (n.d.). *Expanding possible futures: A review of Education Queensland's policy on the education of gifted students in Queensland schools*. (n.p.): Queensland Government / Education Queensland.
- Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly*, 29(3), 103-112.
- Gagné, F. (1991). Toward a differentiated model of giftedness and talent. In N. Colangelo & G. Davis (Eds.), *Handbook of gifted education* (pp. 65-80). Boston, MA: Allyn & Bacon.
- Gagné, F. (1998a). The prevalence of gifted, talented, and multitalented individuals: Estimates from peer and teacher nominations. In R. Friedman & K. Rogers (Eds.), *Talent in context: historical and social perspectives on giftedness* (pp. 101-126). Washington, DC: American Psychological Association.
- Gagné, F. (1998b). A proposal for subcategories within the gifted or talented populations. *Gifted Child Quarterly*, 42, 87-95.
- Gagné, F. (2003). Transforming gifts into talents: The DMGT as a developmental theory. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (3rd edition, pp. 60-74). Boston, MA: Allyn & Bacon.
- Gagné, F. (2004). Transforming gifts into talents: The DMGT as a developmental theory. *High Ability Studies*, 15(2), 119-147.
- Gagné, F. (2008). Building gifts into talents: Overview of the DMGT. Retrieved from <http://www.templetonfellows.org/program/FrancoysGagne.pdf>
- Gagné, F. (2009a). Building gifts into talents: Detailed overview of the DMGT 2.0. In B. MacFarlane & T. Stambaugh (Eds.), *Leading change in gifted education: The festschrift of Dr Joyce VanTassel-Baska* (pp. 61-80). Waco, TX: Prufrock Press.
- Gagné, F. (2009b). Debating giftedness: Pronat vs. antinat. In L. V. Shavinina (Ed.), *International handbook on giftedness* (pp. 155-198). New York, NY: Springer.
- Gagné, F. (2010). Motivation within the DMGT 2.0 framework. *High Ability Studies*, 21(2), 81-99.
- Gagné, F. (2011). Academic talent development and the equity issue in gifted education. *Talent Development and Excellence*, 3(1), 3-22.
- Gagné, F. (2012a). Building gifts into talents: Brief overview of the DMGT 2.0. Retrieved from <http://gagnefrancoys.wix.com/dmgt-mddt#!dmgtenglish/cabg>
- Gagné, F. (2012b). DMGT-related documents in English. Retrieved from <http://gagnefrancoys.wixsite.com/dmgt-mddt/dmgtenglish>
- Gagné, F. (2013). The DMGT: Changes within, beneath, and beyond. *Talent Development and Excellence*, 5(1), 5-19.
- Gagné, F. (2015). Academic talent development programs: A best practices model. *Asia Pacific Education Review*, 16, 281-295.
- GERRIC. (2016). UNSW School of Education 2016 GERRIC Gifted futures forum for talent enhancement [Brochure]. Made available by GERRIC.
- Government of South Australia, Department for Education and Child Development. (2012). Policy statement: Gifted and talented children and students policy. [Updated.] Retrieved from <http://www.decd.sa.gov.au/docs/document/s/1/GiftedChildrenandStudents.pdf>
- Government of South Australia, Department for Education and Child Development. (2016). Policy: Gifted and talented children and students (version 2.1). [Document DECD16/07001.] Retrieved from <https://www.decd.sa.gov.au/sites/g/files/next691/f/gifted-talented-students-policy.pdf?v=1467090054>
- Government of South Australia, Department for Education and Child Development (n.d.). *Unlocking the world: Professional development for teachers*. [Teacher

- development course.] Hindmarsh, SA: DECD Publishing.
- Government of Western Australia, Department of Education. (2010). Gifted and talented. [Version 2.1 Final.] Retrieved from <http://www.det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/policies/gifted-and-talented.en?cat-id=3457123>
- Government of Western Australia, Department of Education. (2011). Gifted and talented guidelines. [Document D11/0144322.] Retrieved from <http://www.det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/web-references/gifted-and-talented-guidelines.en?cat-id=3457123>
- Government of Western Australia, Department of Education. (n.d.a). Gifted and talented: Identification, provision, inclusivity, monitoring and assessment. Retrieved from <http://www.det.wa.edu.au/curriculumssupport/giftedandtalented/detcms/navigation/identification-provision-inclusivity-monitoring-and-assessment/>
- Government of Western Australia, Department of Education. (n.d.b). Gifted and talented: For parents. Retrieved from <http://www.det.wa.edu.au/curriculumssupport/giftedandtalented/detcms/navigation/parents/>
- Gross, M. U. M. (1993). *Exceptionally gifted children*. London, UK: Routledge.
- Gross, M. U. M. (2009). Highly gifted young people: Development from childhood to adulthood. In L. V. Shavinina (Ed.), *International handbook on giftedness* (pp. 337-351). New York, NY: Springer.
- Harreveld, B., & Caldwell, B. (2010). *Evaluation of the Queensland academies*. [Final Report, 14 May.] Retrieved from <http://education.qld.gov.au/parents/pdf/evaluation-of-qlld-academies.pdf>
- Merrotsy, P. (2003). The education of gifted students in NSW - an appraisal. *Australasian Journal of Gifted Education*, 12(2), 18-27.
- Merrotsy, P. (2009). Academic acceleration. In D. Woods (Ed.), *The gifted challenge: Challenging the gifted* (pp. 70-78). Sydney, NSW: NSW Association for Gifted and Talented Children.
- Merrotsy, P. (2015). Supporting outstanding learners. In A. Ashman (Ed.), *Education for inclusion and diversity* (5th edition, pp. 233-262). Frenchs Forest, NSW: Pearson.
- Merrotsy, P. (2017). *Pedagogy for creative problem solving*. Abingdon, UK: Routledge.
- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). (2008). *Melbourne declaration of educational goals for young Australians*. [The Melbourne Declaration.] Melbourne, Vic: Curriculum Corporation. Retrieved from http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf
- New South Wales Board of Studies. (1991). *Guidelines for accelerated progression*. Sydney, NSW: Author.
- New South Wales Board of Studies. (1997). *Guidelines for accelerated progression* (Revised). Sydney, NSW: Author.
- New South Wales Department of Education and Training. (2004a). *Policy and implementation strategies for the education of gifted and talented students: Guidelines for the use of strategies to support gifted and talented students*. Sydney, NSW: State of New South Wales, Department of Education and Training, Curriculum K-12 Directorate.
- New South Wales Department of Education and Training. (2004b). *What are the options? Extension programs for gifted and talented students in comprehensive schools: A discussion paper*. Sydney, NSW: State of New South Wales, Department of Education and Training, Curriculum K-12 Directorate.
- New South Wales Department of School Education. (1991). *Policy for the education of gifted and talented students*. Sydney, NSW: Author.
- Northern Territory Government, Department of Education and Training. (2006a). Policy for the education of gifted students in the Northern Territory (Revised, 3rd edition). Retrieved from <https://education.nt.gov.au/education/policies/gifted-education>
- Northern Territory Government, Department of Education and Training. (2006b). Gifted education guidelines to support the implementation of the policy for the education of gifted students in the Northern Territory. Retrieved from <https://education.nt.gov.au/education/policies/gifted-education>
- Northern Territory Government, Department of Education. (2016). Policy: Gifted and talented education. [Doc 2016/07071, v. 2.] Retrieved from https://education.nt.gov.au/__data/assets/pdf_file/0008/257966/Gifted-and-Talented-Education-policy.pdf
- NSW Department of Education. (n.d.). Gifted and talented students. Retrieved from <https://education.nsw.gov.au/selective-high-schools-and-opportunity-classes/general-information/gifted-and-talented-students>
- NSW Education Standards Authority. (2016). HSC-University pathways for talented students. Retrieved from

http://www.boardofstudies.nsw.edu.au/syllabus_hsc/pathways.html

- Queensland Government, Department of Education, Training and the Arts. (n.d.). Framework for gifted education. [Revised.] Retrieved from <http://education.qld.gov.au/>
- State Government Victoria, Department of Education and Early Childhood Development. (2014). *Aiming high: A strategy for gifted and talented children and young people, 2014-2019*. Melbourne, Vic: Author.
- State of Queensland, Department of Education and Training. (2016). Queensland academies: Bright minds brilliant futures. Retrieved from <https://qa.eq.edu.au/>
- Sydney Catholic Schools. (2015). Gifted education policy. [Policy number TL201401-1.1.] Retrieved from <https://sydcatholicschools.nsw.edu.au/2016/03/25/gifted-education-policy/#more-96>
- Tasmanian Government, Department of Education. (n.d.). Extending learning for gifted students procedures. Retrieved from <https://www.education.tas.gov.au/documentcentre/Documents/ExtendedLearningProcedure.pdf>
- Victorian Association for Gifted and Talented Children. (2017). Retrieved from <https://www.vagtc.org.au/>

Contact Details

Peter Merrotsy
The University of Western Australia
Email: peter.merrotsy@uwa.edu.au

Biographical Notes

Peter Merrotsy is a Professor in the Graduate School of Education at The University of Western Australia. Previously, he enjoyed eighteen years' experience as a teacher and head teacher of Mathematics in rural New South Wales, before joining the School of Education at the University of New England where his research focused on gifted children and youth from backgrounds of so-called disadvantage. In 2013, Peter was appointed to UWA where he continues to conduct research on high ability Aboriginal children, as well as on creativity and problem solving.