Submission to Victorian Parliamentary Inquiry into the education of Gifted and Talented Students

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This submission responds to the invitation extended by the Inquiry Into The Education Of Gifted And Talented Students. Its focus is on the evaluation of provision, in its widest form, for gifted and talented students in Victoria in terms of the effectiveness of current polices and programs.

This response takes the position that a submission of this nature needs to be informed by international knowledge and practice in gifted education. To this end, this submission draws on provision, enquiry and comment from a wide range of contemporary sources that reflect current thinking, provision, policy and research in this area.

The foundation for this submission is the belief that provision needs to be determined based on an explicit consideration of what these students know and how they learn and think. In its broadest sense this includes what they understand and can do (their skills and abilities), their ways of thinking, their identity and self concept, what they believe about the contexts and groups in which they learn, about interacting with others, and what they believe about possibilities and life options.

This submission uses the phrase gifted and talented in the ways used by Gagne (2009). Giftedness refers to the capacity to generate high level learning outcomes. Talent refers to the outcomes that are based on this capacity and that have been shaped through systematic instruction. Educational provision refers to the means by which the gifted ways of learning are transformed into talents.

This submission believes that gifted and talented students are distinguished from other students in their use of the range of ways of knowing described above. To assist in clarifying these distinctions and their implications for educational provision, it uses the adjective ‘non-gifted’. This term is not intended to be judgmental or pejorative.

One context for this submission is Victoria’s policy for gifted education. The policies of the other states provide a basis for comparison. Most specify goals and objectives for gifted education, means of implementation and roles and responsibilities. The current DEECD gifted education web page does not provide an explicit policy statement.

A second context, the enquiry into the education of gifted and talented children in Victoria, follows two recent national enquiries into this issue in Australia over the last 25 years:

1. Report by the Senate Select Committee Oil the Education of Gifted and Talented Children in 1988.

The Reports generate similar sets of recommendations, particularly in terms of educational provision and the need for pre-service and in-service training of teachers. An evaluation of the progress made between 1988 and 1999 is provided by Geake (1999). It is not appropriate to repeat the recommendations here, but to note that they provide a useful context for the present Enquiry.

Assumptions made by this submission:
1. Gifted and talented learners can understand a topic in ways that differ in their quality from those of their non-gifted peers. A gifted understanding of a topic is more elaborated and differentiated conceptually. It is more typical of an ‘expert’ understanding of the topic.

2. Gifted knowing and thinking needs to be seen in the context of the ‘total person’ and the cultures in which they interact. In addition to the range of aspects of knowledge noted above, whether an individual displays evidence of talented understanding or learns in this way depends on various ‘extra cognitive’ situational factors and chance (Gagne, 2009). Educational policy and provision needs to be based on the ‘total person who is gifted and talented’. Problems frequently emerge when the ‘total person’ is not the focus or when integration is ignored.

3. Students who are gifted and talented approach the teaching context in ways that are qualitatively different from those of their non-gifted peers; they learn and think differently.

4. Students can be gifted and talented in a range of knowledge domains. There are several aspects of this assumption, for example, (1) gifted thinking in one domain does not guarantee gifted thinking in others (the concept of ‘asynchronous development’) and (2) some students who display gifted learning and thinking also display underachievement and learning difficulties, (the concept of ‘dual exceptionalities’).

5. The multiple groups and cultures to which a student belongs influence the display of gifted and talented knowing and thinking. Cultures differ in the types of knowledge and the ways of thinking they value. This includes their classroom culture, for example, whether it involves learning primarily other gifted versus non-gifted students.

6. Educational provision makes assumptions about how students learn. The provision of pedagogy, curriculum, assessment practices, student placement, educational policy and school organization, by necessity, make these assumptions. The focus of this submission is on the extent to which the assumptions made are appropriate for gifted and talented education.

1. The focus on what and how gifted students know.

The ‘currency’ in which teachers and schools transact is the content taught, the means of teaching it and the matching emergent student knowledge (in its broadest sense as noted above).

Beliefs about what constitutes gifted and talented knowledge and how gifted students learn and think is currently changing. There is a discernable trend internationally away from a focus on ‘gifted potential’ derived from theories of intelligence to definitions of giftedness that are based on the quality of the understanding and learning outcomes generated when these students are exposed to teaching.

The contemporary focus on gifted learning outcomes is exemplified by the Actiotope Model of Giftedness (AMG) developed by Ziegler (2005) and the ‘WICS’ model developed by Sternberg (2003). Ziegler describes giftedness in terms of the strategic use of action sequences that lead to excellent outcomes. Sternberg describes giftedness in terms of the synthesis of intelligence, creativity and ‘wisdom’ and draws on his research on ‘successful intelligence’. Gifted students show this synthesis in their higher level solution of complex problems. Both perspectives link giftedness with the capacity to act to generate outcomes that are judged to be ‘exceptional’.

The ways in which gifted and talented knowing and thinking are defined have relevance for educational provision and practice. Definitions of giftedness that are linked with student
knowledge outcomes following teaching are more relevant to the work of teachers and schools than definitions that are linked with intelligence and potential. Teachers observe, interpret and evaluate students’ knowledge during teaching and use this to plan future teaching. They are used to comparing students’ outcomes and describing them in terms of curriculum standards, such as VELS.

Teachers and schools have more difficulty mapping definitions that are linked with intelligence and potential into their regular classroom practice and curriculum (Munro, 2010c; VanTassel-Baska & Stambaugh, 2005). As well, these definitions tend to move educational provision away from the realm of regular classroom teachers.

One way of describing the high level understanding of gifted and talented students in classroom learning is in terms of the ‘novice-expert knower’ dimension (Munro, 2011). This has been well researched in psychology as a framework for evaluating the understanding of individuals and for describing its quality.

The novice-expert knower concept provides a valuable bridge between gifted and talented knowing and thinking and regular classroom practice in a range of ways; it

1. provides teachers and schools with practical and consistent criteria for describing what ‘talented’, ‘excellent’ or ‘wise’ levels of understanding of topic ‘look like’;
2. can be applied to all subject areas; and
3. helps teachers and schools recognize the multiple ways in which individuals can display giftedness and talent, for example, ‘creative intellectual gifted’ and ‘schoolhouse gifted’ understanding can be more easily identified in the learning outcomes of students.

The present submission recommends that future policy and educational provision for gifted and talented students be referenced on an explicit foundation that specifies how these students know, think and learn and that the ‘expert knowing and understanding’ model could contribute to this foundation. It does not reject the concept of ‘gifted potential’ derived from theories of intelligence but suggests that this conception is not the most useful one for teachers and schools. It suggests that teachers are more able to interact with gifted and talented students when they have the ‘conceptual tools’ needed to ‘see’ gifted knowing and thinking in the context of teaching and learning.

When teachers are familiar with the multiple forms of ‘expert knowing and understanding’ for a topic or a subject they are teaching, they can more easily recognize and describe gifted students’ knowing and thinking (Munro, 2011). It helps them to

1. recognize the multiple ways in which students can be gifted and talented. In terms of Renzulli’s categories for example, schoolhouse gifted understanding would have different expertise qualities from creative-productive understanding.
2. recognize the multiple levels of gifted and talented knowledge students can show; some students can show a more advanced level of expertise than others. Students’ outcomes can be sequenced in terms of the level of expertise and complexity they show.
3. understand cultural multiplicity in the display gifted and talented knowing and thinking; expert knowing and thinking can be shown in different ways in different cultures.
4. identify students with dual exceptionalities; some students can have an expert understanding of a topic and still have literacy difficulties.
5. validate decisions they have made about identifying gifted and talented students; the teachers have a greater awareness of what to look for in the students’ learning outcomes.
6. to recognize and describe instances of gifted and talented knowing and learning within regular curricula guidelines.
7. differentiate curriculum from a learning perspective and to embed the differentiation in the regular classroom.

This focus can also assist Victoria to develop a conception of giftedness and talent that can respond to future changes in our culture and be aligned with them. The knowledge of our culture is likely to change in the future with developments in technology. A focus on giftedness and talent as expert knowing and thinking is likely to retain relevance and appropriateness as our culture continues to develop and evolve.

This submission also recommends that both the statewide educational providers and individual schools communicate explicitly to their communities the assumptions they use to provide gifted and talented education. An explicit perspective on gifted and talented knowing and learning by the statewide educational authorities would ensure schools and networks had a consistent basis for processes such as curriculum development, assessment practice and evaluation of learning and teaching. As well, schools and networks can use the basis to develop their version of it. Each school embeds the state perspective in its unique context and develops its explicit version. The individual versions would guide implementation and the evaluation of provision at the school level.

2. Identification of gifted and talented students.

Teachers and schools need procedures for identifying instances of gifted and talented knowing, learning, thinking and understanding that reflect how these students think and learn.

Identification of gifted and talented students is most successful when the students have the opportunity to show the breadth and depth of their knowledge (including thinking and beliefs) about topics. Identification involves a number of steps or phases:

1. the student usually displays instances of higher level outcomes that were unexpected (to teachers, parents, peers, etc)- the initial ‘referral data’;

2. formal screening is implemented to examine the breadth, depth and endurance of the outcomes (usually with a normative or comparative focus); and

3. in-depth assessment is implemented to examine the particular areas in which these students are gifted and talented and their areas of higher level thinking and outcomes.

Together these steps lead to compiling a ‘gifted learning profile’ for each student.

There is a need for the comparison of students’ outcomes to identify the highest levels of knowing and thinking. The comparison can involve both

1. performance on formal assessment tasks that compare students in terms of prescribed criteria on convergent outcomes (such as intelligence tests and achievement tasks).

2. performance on open-ended tasks on which students have the opportunity to show ‘all they know / can do’ about a topic or issue and the depth of their thinking about it. These outcomes are not described in terms of established standard criteria but in terms of the quality of the knowledge and thinking that underpins it. Outcomes may be described in terms of their ‘semantic complexity’ (breadth and depth of thinking, the network of linked ideas on which it is based and its originality).
3. The use of dynamic assessment procedures, particularly to identify gifted and talented thinking and knowing by culturally and linguistically diverse learners using, for example, procedures developed by Lidz and Macrineb, (2001). These procedures are increasingly being used in the identification of gifted learners internationally.


This submission recommends, in addition, the use of tasks that are examples of 2 above. These permit gifted and talented students to show the depth and breadth of their knowledge of topics or issues and that permit the use of dynamic assessment. This can include students showing their thinking and understanding of issues and challenges through demonstrations.

It also recommends the use of procedures such as creative problem solving in addition to the more convergent assessment tasks currently used. These types of tasks are increasingly being used internationally to identify gifted and talented learners, for example by Sternberg and colleagues (Hedlund, Wilt, Nebel, Ashford & Sternberg, 2006). They tap abilities separate from those measured by traditional intelligence or ability tests (Sternberg, Nokes, Geissler, Prince, Okatcha, Bundy & Grigorenko, 2001).

Diffuse or creative problem solving tasks can be created for all areas of study (Munro, 2010b). Teachers can develop problem solving scenarios to identify gifted and talented students’ thinking and knowing in all areas of the curriculum. The students’ outcomes can be displayed in a range of ways, for example, written, spoken, drawn or demonstrated. They are scored in ways that assess the complexity of students’ knowledge, their thinking and learning capacity, their metacognitive ability, their awareness of leadership issues and their ability to interpret and frame up problems and challenges.

This submission recommends policy and provision relating to the systematic statewide opportunity for the identification of gifted and talented students. Neither the State or the Commonwealth assessment authorities currently provide either advice and guidance, procedures or identification tools for this. One would expect that such identification procedures could be offered on an ‘on-demand’ basis.

Few items on NAPLAN test battery permit identification of those students achieving in the highest 10\textsuperscript{th} percentile range. The on-line ‘on demand’ assessment tasks in English and Mathematics provided by VCAA can identify students who achieve at a VELS level higher than their year level. This platform could be developed to provided a more comprehensive screening of student competence, leading to the identification of students who may be gifted and talented.

This submission recommends that professional learning programs that equip teachers and schools to identify instances of gifted knowing, learning and thinking in regular classroom topics be implemented. These programs can guide teachers to develop these types of tasks and provide them with the skills need to monitor gifted and talented learning both summatively and formatively. The procedures can be referenced against regular curricula.

This submission recommends the use of on-line technology for implementing the assessment procedures for identifying gifted learning and thinking. On-line support materials could provide virtual support for differentiated student assessment sequences and data gathering procedures.
3. Equity of access to quality educational choices for gifted and talented students and their families.

Equity of access to quality educational choices for gifted and talented students is interpreted here as access to school level structures and processes for them and access to appropriate curriculum choices. The need for modified curriculum provision for gifted and talented learners has been acknowledged for some decades, for example, in the Marland Report to the USA Congress in 1972.

This submission interprets ‘quality educational choices’ to include:

1. the most appropriate school context
2. the most appropriate curriculum provision

3.1 The most appropriate school context. This submission assumes that successful ‘total person’ learning is culturally referenced, with students having the opportunity to build a ‘group knowledge’ by learning collaboratively. For gifted and talented learners, this would mean the opportunity to learn with ‘like minded’ peers for at least part of their regular, on-going learning. Learning with similar-thinking students affords gifted and talented students the opportunity to experience a range of influences usually associated with effective learning (for example, Hattie, 2003). These include receiving peer feedback, learning in a positive classroom environment and being challenged to learn.

In its description of schooling options for ‘gifted and high potential’ students, DEECD supports providing access to ‘like minded’ peer learning contexts. At present 36 Victorian secondary schools implement the Select Entry Accelerated Learning Program (SEALP), of which 11 are in rural areas. This program aims to provide the opportunity for ‘gifted and high potential’ students to learn at a faster pace and in greater depth than their age peers. As well, four selective entry high schools provide an educationally enriched environment for high-achieving students for students in Years 9 to 12. In addition, specialist education facilities such as the Victorian College of the Arts Secondary School cater for secondary age students who display talent in music and dance.

At the primary level, access to gifted education contexts is more variable. Whether a primary school offers a gifted education context is a function of a range of factors, including the school’s priorities, its population and the commitment of its staff to gifted provision and their professional knowledge of it.

This submission is not aware of research in Victoria that examines the extent to which the student places in SEALP and four selective entry high schools are sufficient to accommodate the number of students identified as gifted and talented. It recommends that such research be implemented and that it include analysis of

1. the domains of giftedness that are accommodated by the SEALP, selective entry and specialist secondary schools. This submission recommends identifying the domains of gifted and talented learning that are under- or not represented by access to specialist educational opportunities.

2. availability to students in country areas. The author of this submission is aware that access to the SEALP is difficult for gifted and talented students living in rural areas such as Far East Gippsland because of their physical location.
3. accessibility to Indigenous and dual exceptional students because of the entry criteria currently used by the SEALP and selective entry schools and the focus of their programs.

4. The professional knowledge and skills needed for teaching in SEALP and selective entry schools and the levels of knowledge, experience and qualifications of teachers currently teaching in these programs.

5. Measures used to monitor the current success of these programs.

This submission also recommends an analysis and evaluation of current provision for primary school students with the goal of a more systematic and consistent delivery. This writer is aware of the influence of the current lack of effective provision on many young gifted and talented students. These include emotional, identity and social interaction problems, self doubt, disengagement from and rejection of school and various forms of conduct disorder as well as physical health issues.

Many of these problems have arisen in part because of the lack of an appropriate learning context. The best solution taken by many families has been home schooling for their gifted and talented children (see, for example, http://austega.com/gifted/homeschool.htm and http://homeschoolaustralia.com/articles/gifted.html).

Students at both the primary and secondary levels can be grouped for collaborative learning in various ways. This submission recommends that consideration be given to using contemporary information technology to develop ‘virtual learning academy contexts’ or VLAs (Munro, 2009) that can offer gifted students the opportunity for advanced learning and investigative research with ‘like-minded’ peers and mentors. These contexts can improve access for gifted and talented students in rural areas and those who are otherwise denied access because of minority, diverse cultural or specific learning reasons.

Munro (2009) describes how VLA contexts can provide these students with the opportunity to participate in a range of activities generally associated with the pursuit of knowledge, including workshops and master classes run by leaders in various subject areas, investigations and personal research and involvement in competitions. Students are encouraged to share their new knowledge with peers in a range of ways and to use their advanced knowledge and understanding in ways that benefit their communities and cultures and to develop gifted leadership awareness, thinking and attitudes.

Because the VLA context provides the opportunity for personalized and ‘own time’ learning opportunities, they can also be used to support self-managed and directed student learning and to offer access to ‘educational counselling’ to assist them to understand their optimize their gifted learning and thinking. This is discussed in section 5.

The VLA context can also be used to distribute teacher knowledge of gifted and talented education more equitably.

3.2 The most appropriate curriculum. This assumption assumes that gifted and talented students learn best when the curriculum takes account of how they learn. This usually means modification of the regular curriculum.

The modified curriculum provision usually involves providing the opportunity for the gifted and talented learners to progress at a rate commensurate with their learning capacity. One alternative has been to implement an acceleration program. Colangelo, Assouline and Gross (2004) in their report A Nation Deceived: How Schools Hold Back America’s Brightest Students Volumes 1 and 2 describe a range of ways in which this can be done. DEECD policy, in its advice to schools at
The recommended ways are listed here to provide a ‘measuring stick’ for evaluating current provision in Victoria and for considering future options. The ways include:

1. early entry to kindergarten or to primary, secondary or tertiary education.
2. grade-skipping
3. continuous progress at the gifted student’s rate of learning, both where this controlled by the teacher and the student (self-paced instruction)
4. subject acceleration /partial acceleration and ‘combined classes’, where the gifted student is located in the classes of chronologically older students.
5. curriculum compacting; the gifted student’s curriculum is modified, for example, to include less introductory activity, drill, and practice or bigger increments in learning compared to the curriculum
6. telescoping curriculum; the gifted student is taught at a faster rate than peers and is placed in a higher grade.
7. mentoring
8. extracurricular programs
9. correspondence courses
10. early graduation
11. advanced credit is available; the gifted student’s advanced knowledge is credentialed in various ways, for example, the gifted student studies subjects at one level and receives credit for a corresponding subject at a higher level, the student studies subjects at an earlier age (advanced placement) or receives advanced credit by completing successfully the relevant assessment requirements such as examinations, (credit by examination).

Current provision can be evaluated in terms of the extent to which gifted and talented students have access to curricula and learning opportunities that have been differentiated and personalized in these ways.

The author of this submission knows of no current evaluation of the extent to which gifted and talented students in Victorian state schools have access to each of these differentiations. It is the author’s anecdotal evaluation of current provision that

1. accelerated progress through school, through grade-skipping, early entry and subject acceleration, early graduation are sometimes implemented.
2. access to continuous progress at the gifted student’s rate of learning, curriculum compacting, access to correspondence courses and telescoping the curriculum are implemented much less frequently.
3. mentoring is sometimes implemented, often through linking schools with universities or other organizations. Selected year 10, 11 or 12 students from Barwon South Western and Gippsland Regions in 2007 worked with a ‘virtual mentor’ who was a tertiary student in an area of mutual interest.
4. extracurricular programs are available, usually in metropolitan areas and often through private agencies.
5. withdrawal programs are implemented; selected gifted and talented students are withdrawn
from their regular classrooms to work on learning activities in a resource room context.

In terms of ‘total person’ learning, it is appropriate to think in terms of a synthesized individual learning trajectory of each gifted and talented learner, with the various ways of differentiating and personalizing both the curriculum and the pedagogy contributing to this as appropriate. A personal learning pathway for each gifted and talented learner can include a clear consideration of how the student’s knowledge and learning will develop, an explicit implementation pathway and systematic procedures for monitoring regularly learning and fine tuning provision. It is this writer’s experience that few gifted and talented students in Victorian schools have these types of individual learning plans or pathways.

It is also possible to examine the extent to which the state education providers equip schools with the means for developing such personal learning pathway for each gifted and talented learner. In terms of central provision or leadership in curriculum provision:

1. The current Victorian Essential Learning Standards (VELS) makes no reference to curriculum differentiation for these students.

2. VCAA offers no advice about relevant assessment strategies for gifted and talented students.

This submission believes that VELS can contribute to developing and implementing personal learning pathways for gifted and talented learners. Munro (2010c) shows how the Discipline-based Learning strand, the Thinking Processes strand and the English strand can be combined and modified to take account of individual gifted and talented students learn:

- The Discipline-based Learning strand describes the topics about which the gifted and talented students think and build the more elaborated understanding.

- Thinking Processes strand describes developmental trends in thinking ability, including creativity, that is particularly useful for monitoring gifted learning and thinking.

- English strand, with its focus on trends in the ability to read, write, speak and listen is useful for monitoring how gifted and talented students use these abilities to learn and to display what they know. This strand is particularly useful for understanding the learning needs of gifted and talented students who are underachievers or who come from minority or linguistically diverse groups.

Munro also describes how using the conventional curriculum as a knowledge pathway can assist regular classroom teachers to recognize and identify instances of gifted and talented learning, to reflect on the understanding these students can form and how they might be taught. It is this writer’s experience that few teachers and schools use the Victorian Essential Learning Standards to differentiate pedagogy for gifted and talented learners.

4. Building the professional knowledge of schools and teachers

Whether gifted and talented students have access to quality curriculum and choices depends on the level of staff knowledge in the school and classroom. The extent to which students in Victoria currently have access to a range of quality educational choices depends on the level of education and on the professional knowledge in classrooms and schools to implement effective teaching programs for these students.
This submission comes from the belief that the professional knowledge of school staff in relation to gifted education provision is comparatively low, particularly when compared with staff knowledge of other aspects of curriculum provision. It believes that

1. provision will be enhanced when staff knowledge is enhanced;
2. staff knowledge is more likely to be enhanced when the school has processes for introducing new knowledge into the school, for embedding it in the school context and for leading the change in staff knowledge;
3. school knowledge is enhanced when the staff roles in the school are differentiated.

To evaluate the current quality of professional knowledge about gifted and talented education provision, this submission examines:

1. whether schools identify gifted education as a priority area for building their professional knowledge,
2. the level of professional knowledge in schools about provision in this area and
3. the current avenues for schools to access professional development in gifted education provision.

4.1 Do schools identify gifted education as a priority area for building their professional knowledge?

Victorian state schools identify priorities for improvement and for targeting staff knowledge to achieve this through their triennial plans. It is the experience of this writer, in part as a school reviewer, that gifted and talented education is less likely to be identified as a school priority in triennial school improvement plan than improved curriculum access for underachievers.

4.2 The level of professional knowledge in schools about provision in this area.

Further, schools generally are not aware of what they would need to know to improve their provision in this area. This submission notes that educational authorities have not specified the level of knowledge and skill staff need for effective gifted education provision, both within regular schools and within specialist schools. It recommends that steps be taken to specify the types of professional knowledge and skills, possibly as teaching competencies or standards needed for effective gifted and talented provision by

1. teachers in regular schools,
2. teachers in specialist schools for gifted education,
3. curriculum consultants and coaches and by
4. school leaders in these schools.

The Victorian Institute of Teaching could, for example, develop standards of professional practice in gifted education that lead to Endorsed teacher education programs, as it has for special education.

As well, this submission notes that there is little public domain information relating the current level of knowledge among the teaching profession relating to gifted education provision, both within regular schools and specialist schools for gifted and talented students. It recommends that information be collected re

1. The qualifications of teachers that equip them to teach these students
2. The involvement of teachers in relevant professional learning activities.

These types of data could be collected efficiently using on-line data gathering procedures.
4.3 **The current avenues available for schools to access professional development in gifted education provision.**

There are currently several sources of professional development opportunities for teachers and schools wanting to build their knowledge in these areas:

1. The teacher education programs offered by universities, both at the pre-service and at the postgraduate level. A recommendation from the Senate Select Committee on the Education of Gifted and Talented Children in 2001 recommended that all pre-service trainee teachers complete at least one semester of study in gifted education.

2. The professional development activities provided by associations such as the Victorian Association for Gifted and Talented Children (VAGTC) and the Centre for Strategic Education and the conferences offered by professional associations. These are exemplified by the list of activities provided by The Victorian Institute of Teaching.

3. The in-house professional development run by DEECD, for example, the SEAL PD program and by individual schools.


These sources cover a range of aspects of gifted education provision and potentially deliver a broad understanding. The extent to which they actually change teacher practice and school policy and focus is variable and problematic. Staff accessing these activities have the option of integrating the knowledge they gain with what they knew and embedding it in their professional practice.

Feedback from teachers who have accessed the GEPDP exemplify this. Teacher responses and evaluations depended on their earlier knowledge of the area. Many have found the content of interest but have often not changed their practice as a result.

This submission recommends a more systematic focus on professional learning that is intended to increase the likelihood that school wide practice is enhanced.

4.4 **A systematic professional development focus that changes school practice is recommended.** This submission recommends and proposes the following multi-strand approach to building a knowledge of gifted and talented education provision in a school:

1. Teacher development strand – to provide the means for embedding pedagogic knowledge in schools. A program for equipping teachers to cater for gifted and talented students could be developed as follows:

   - training ‘teacher-leaders of gifted education’ to guide, embed and direct gifted education provision in their school. These teacher leaders would implement ‘in school’ professional learning programs in their schools. They would plan professional learning pathways for PLTs and individual colleagues to identify gifted learning in their teaching, to elaborate and differentiate topics they will teach, to use teaching practices that facilitate gifted and talented learners and to use VLAs as key aspects of their teaching.

They would have an enhanced knowledge of gifted learning and knowledge and the skills needed to embed identification procedures, provide professional teaching for colleagues (teacher and topic differentiation), guidance in modifying teaching.
modeling, coaching, demonstrating, and to monitor the success of the teaching, provide gifted counseling and support for gifted students and their families, be equipped to advocate for gifted students, guide the development of school wide policies and processes for gifted learners (identification, etc).

- developing a teacher professional development program. The topics will include; the characteristics of gifted and talented thinking and knowledge and how to identify these in regular classroom contexts, classroom strategies and pedagogy for supporting gifted and talented learning and for differentiating teaching in particular subject areas, recognizing creativity and innovative thinking, monitoring gifted learning, counseling and scaffolding gifted.

2. School leadership strand – this would focus on gifted education provision from a leadership perspective and would equip school leaders to
- provide instructional leadership for gifted and talented learning
- develop a vision and goals for gifted provision in the school and to unpack these in terms of school processes
- audit, collate, analyze, evaluate and enhance the current provisions of the school in gifted education provision and to provide additional options
- develop an explicit professional learning and implementation pathway with outcomes, goals and ‘deliverables’ specified for each term
- identify and display a ‘code of teaching practice for gifted and talented education’.

3. a systemic on-line school support strand – to provide virtual support for the identification of gifted and talented learners, professional development materials, strategies and resources for differentiating teaching (including sharing resources developed in schools), data gathering procedures for monitoring the provision. It is recommended that the on-line support materials provide virtual support in the following areas:

1. professional development materials, strategies and resources for differentiating regular teaching; this will include videos of teaching.

2. differentiated student learning and teaching sequences; these will be based on how gifted students learn and could differentiate and elaborate topics in English, Maths and Science domains of National Curriculum and design and draft learning activities for use by gifted and talented students. This upward differentiation will be done by panels of the teacher leaders.

3. data gathering procedures for monitoring provision.

Part of this professional learning agenda could be achieved through existing State and Commonwealth institutions such as the Bastow Institute and The Australian Institute for Teaching and School Leadership (AITSL). On-line support materials could be developed and provided by VCAA and the Student Learning Programs Division DEECD at the state level and ACARA at the national level.

The integrated professional learning approach here has direct relevance for meeting the needs of school leaders and teachers both metropolitan and regional school communities.

5. Policies and programs for gifted and talented students.
Earlier sections of this submission have examined aspects relating to policies and programs for gifted and talented students. Section 1 recommends for gifted and talented education provision an explicit foundation that is based firmly and systematically on the quality of student understanding and thinking that can be described in terms of the novice-expert continuum. Section 3 recommends the provision of learning contexts in which these students can learn collaboratively for at least part of their education and curricula that accommodate their knowledge and thinking. It recommends the development of virtual learning communities and the elaboration and differentiation of regular curricula as means of achieving these. The recommendations in this section examine policies and practices that relate to gifted learning and teaching. Two key access aspects are examined:

1. access to appropriate learning opportunities
2. access to ‘educational counselling’ for being a gifted learner and thinker.

5.1 Access to appropriate learning opportunities

Because their ways of learning and thinking differ from those of non-gifted students and because they may not learn easily when exposed to externally managed and directed teaching, gifted and talented students frequently do not learn well in the large group regular school context. This submission proposes that these students have access to appropriate learning opportunities.

At present at a statewide level there is virtually no support provided for gifted students in regular classrooms. At the individual school level, some schools provide restricted access to this. The access and its quality is limited by the school’s professional knowledge of curriculum differentiation and gifted learning and its practical capacity to support the practical implementation.

An example of the need for these types of activities is shown in the performance of 15 year old Australian students in the Programme for International Student Assessment (PISA). In an analysis of the 2009 outcomes Thomson, De Bortoli, Nicholas, Hillman & Buckley (2009) note that

“Australia was the only high performing country to show a significant decline in reading literacy performance between PISA 2000 and PISA 2009. Of concern is that the decline is primarily among the high-achieving students, and that the proportion of both males and females in the highest two proficiency levels declined significantly and substantially over the nine-year period, while the proportion of males in the lowest proficiency levels increased. (p296).

Australian schools generally need to provide successful educational programs for higher achieving students in literature and language. Very few school level curricula specify student learning pathways for students who are gifted in these areas. Many teachers and schools in recent years have shown an awareness of this need in their requests for professional development in teaching to accommodate those students who are more able to comprehend texts at a high level and who are able creative writers. Teaching strategies to achieve this are described in Munro (2011). In particular, there is interest in understanding and recognizing higher level reading inferential and evaluative comprehension in classrooms and strategies for achieving this.

As noted earlier, one way of supporting these students is to provide learning opportunities that complement their mainstream education. For any topic or subject the students are required to learn, this could include supervised access to virtual learning academies that comprise two components:

1. a sequence of web pages that differentiate topics in the regular curriculum and that support self-managed and directed student learning by gifted and talented students. Topics in the English, Maths and Science domains of National Curriculum could be upwardly differentiated and elaborated to foster various levels of gifted understanding. These levels
of understanding can be generated using the novice to expert continuum (Munro, 2010c, 2011). Learning activities could be designed for the multiple domains of gifted knowledge again using the novice to expert continuum. The sequence of web pages would include procedures for determining the entry knowledge of gifted and talented students and the areas of their gifted knowing and thinking.

2. ‘specialist virtual learning communities that offer the opportunity for advanced learning and investigative research with ‘like-minded’ peers and mentors. The students participate in a range of activities involving the pursuit of knowledge, including investigations and personal research, workshops and master classes run by mentors in relevant domains and involvement in competitions. They are encouraged to share their new knowledge with peers in a range of ways and to use their advanced knowledge and understanding in ways that benefit their communities and cultures.

This type of access can be combined with some to the types of provision mentioned in 3.2 *The most appropriate curriculum.* It would allow these students to make continuous progress at the gifted student’s rate of learning and allow curriculum compacting, again according to the gifted student’s approach to learning. They could include access to mentoring and link with relevant extracurricular programs.

This provision, could, for example, be linked with appropriate professional knowledge and supportive school processes and structures, to contribute to dealing with the presently more problematic, ad hoc provision in many primary schools.

The VLA context in also useful for underachieving gifted students. These students can continue to follow their personalized learning pathway, work on relevant learning strategies to deal with the cause of their underachievement and participate in the learning communities. The VLA context also facilitates the involvement of mentors in the learning programs.

The Victorian Distance Education Centre has a well-developed capacity to implement learning programs that draw on the state curriculum and personalize student learning opportunities. The professional knowledge of content and personalized pedagogy of this Centre, access to IT infrastructure and its capacity to monitor and evaluate the effectiveness of the teaching could contribute to the implementation of teaching that involves the upwardly differentiated curriculum and that takes account of how gifted and talented students learn.

This submission recommends

1. The collection of school level data relating to the procedures by schools used to provide access to appropriate learning opportunities for gifted and talented learners, as described above.
2. Processes be implemented to provide these students with access to ‘specialist virtual learning academies’ to complement their mainstream education as described above. This includes provision at both state-wide and local school levels as recommended above and building professional knowledge.

5.2 **Access to ‘educational counselling’ for being a gifted learner and thinker.** Associated with their ways of gifted knowing and thinking, these students have social-emotional needs that impact significantly on their development and wellbeing and frequently necessitate focused ‘educational counselling’ (Wood, 2010).

These needs can be explained in part in terms of the demand to fit into regular schools programs. Non-differentiated educational provision causes a range of affective and emotional problems for
gifted and talented students. The externally managed and directed teaching in large group contexts can create particular learning stress for these students. Factors such as self perfectionism, lack of recognition by others of what they know and inappropriate feedback can contribute to this.

Additionally, in peer group interactions their ways of thinking and doing things differ from those of their non-gifted peers. They may not learn easily or value the range of acceptable social interactional conventions used by their same-age non-gifted peer groups. As a consequence, these students frequently do not fit well in the peer group and may not receive the appropriate level of positive feedback from peers. Their confidence and self efficacy in these contexts is frequently negative.

An example of this is in the formation of an identity. Gifted students need to form and define their identities in ways that differ from those of their nongifted peers; they need to form a ‘gifted identity’ (Peterson, 2006). They need the opportunity to know how they are gifted, what this giftedness means to them and how this influences their lives. Forming an identity requires access to appropriate models and on-going supportive feedback from others. Because some gifted students don’t consistently access this, they have difficulty developing a stable identity. Some do not develop a positive awareness of their giftedness and do not see it accepted by others. They seek to deny or to hide and mask their giftedness.

Educational counseling for being a gifted learner and thinker is important, particularly when the student is in regular school context. Without it these students frequently become alienated from schooling, experience a range of emotional problems including depression and extreme anxiety and may become the focus of peer bullying.

Nicpon (2009) and Wood (2010) describe several effective counseling approaches for these students but also note that this area of counseling is not well understood or handled by schools. The problems displayed by these students are often more likely to be associated with lack of interest in or commitment to learning, school refusals, learning anxiety, antisocial behaviours, ADHD or conduct disorders than with gifted learning and thinking.

This submission recommends that schools and teachers have the opportunity to learn to recognize instances of socio-emotional needs by gifted and talented learners, that the roles of teachers and qualified counselors in this process be clarified and that appropriate professional learning programs be provided to build knowledge and skills in this area.

The recommendations in both 5.1 and 5.2 have direct relevance for meeting the learning needs of students in both metropolitan and regional school communities.

5.3 Programs to enhance the learning opportunities of gifted and students. Various programs have been introduced to cater for gifted and talented students in Victoria. G.A.T.E.WAYS (Gifted and Talented Education, Extension and Enrichment) is an example. It is a private organization that runs short term and extended programs intended to challenge gifted children intellectually and help develop their individual talents in Victorian primary and secondary schools. This submission identifies three programs that are associated directly with this submission.

1. Using diffuse problem solving tasks and dynamic assessment procedures to identify gifted knowledge and thinking. This program was first used in Victorian primary schools in 2010 to identify successfully gifted and talented students. It uses diffuse problem solving tasks and dynamic assessment procedures as a validated classroom identification procedure. It provides an opportunity for students to display the extent of their understanding and thinking about a problem or issue. It is particularly useful gifted and talented students who
may otherwise have difficulty displaying their gifted knowledge and thinking. It is described in part in Munro (2010a).

2. **Assisting GALDSS: senior secondary students who show dual exceptionalities.** Some senior secondary students are both gifted and have specific learning disabilities such as dyslexia and other reading and writing difficulties that limit their ability to display their gifted understanding. These are the gifted academically learning disabled students (or GALDSs). This project analyzed the cause of their learning difficulties and taught them how to show their knowledge effectively in writing. It is described in Munro, 2010b.

3. **Using VELS and the ‘expert knower’ model to differentiate teaching and curriculum for gifted and talented students.** This project guided teachers to differentiate both their teaching and the VELS topics they were teaching in systematic ways. It has been applied successfully in several content areas. This work is described in Munro (2010c).

6. **Provision for parents and families**

The parents of gifted and talented students can require assistance in a range of areas. This ranges from guidance to understand how their gifted child learns and thinks to accessing the most appropriate educational opportunities. Parents and families in Victoria can currently access a number of advisory services:

1. The DEECD has a set of web pages that describe the characteristics of gifted and talented learners, indicate how to nominate a child as potentially gifted, suggest various schooling options available for gifted students and provide guidance on how to access the SEAL and specialist secondary schools.

2. Community groups such as Support Groups Victoria VANGSG - Victorian Affiliated Network of Gifted Support Groups (www.gifted-children.com.au/parent_support_groups) provides support to member groups throughout Victoria. These include regular meetings, workshops, newsletters and individual advice and counseling.

The author of this submission is aware that the parents of gifted and talented children have queries and concerns about their child’s development from an early age. These range from how to manage their child’s education (the most appropriate school context, when to start school, their role or activity in nurturing the child’s learning, dealing with school engagement problems) to issues around the child’s everyday life (for example, making friends, participating in extracurricular activities). Frequently these problems become more intense as the young person enters adolescence.

This submission recommends the establishment of an enhanced family support-advocacy facility that

1. develops a data base of the most frequent questions and issues that confront the parents and families of gifted and talented students, links these with potential solutions and makes this information available to parents, possibly using the internet,

2. maintains contact with the community services and assists and supports their work where appropriate and

3. provides parent access to skilled educators in this area who can provide both advice and advocacy for individual children where necessary.

7. **Enhanced learning opportunities through collaboration with community, business and industry**
Gifted and talented students benefit greatly by learning in collaborative ways with members of the community, specialist institutions, business and industry and tertiary education in mentor and master class interactions. Members of these groups, for example, artists, scientists, writers, econometricians, journalists or technologists can make a valuable contribution to gifted education provision, particularly within the VLA context.

As well, this submission believes that it is useful to encourage the gifted students to develop the awareness that they can use their advanced knowledge and understanding in ways that benefit their communities and cultures. This assists in developing an awareness of gifted leadership and the thinking and attitudes associated with it.

This submission recommends that gifted education policy include the involvement of community mentors who can contribute to personal learning pathways of students and that processes at both the school and state levels be implemented to facilitate this.

8. Need for integrated gifted education provision in the future.

One of the key characteristics of gifted and talented education in Victoria at present is the disparate provision of aspects. There is the need for a co-ordinated delivery that, while integrating the various aspects mentioned above, would still allow each to develop independently.

This submission recommends both integrating policy for the delivery and an agency that can deliver this integration. It identifies the need for on-going monitoring and evaluation of the delivery with the capacity to adapt and modify the delivery if necessary.

It also recommends consideration be given to collaboration and joint development with other states. The National Curriculum can provide one focus for this.

9. How prominent is gifted and talented education in the national education dialogue?

It was noted in the introduction that Australia has hosted two recent national evaluations of the provision of gifted education. These enquiries were initiated in part through a valuing of equity in educational opportunity and in part through a valuing of the knowledge outcomes gifted and talented thinkers can generate for the nation.

It is useful then to reflect on why prominent Australian educators at the time of the Enquiries did not advocate both in public media domains and also in political domains for more of the recommendations to be achieved. This leads one to examine the level of prominence of gifted and talented education in the thinking of prominent educators or on the agenda of the national education dialogue in Australia.

A ‘meeting place’ for the educational leaders in Australia is the Australian Institute for Teaching and School Leadership (AITSL). It is reasonable to expect that topics identified as relatively important to Australian education and indeed to the Australian culture of the future would be prioritized in its dialogue.

The web site of the AITSL provides a number of research reports, papers and articles written by prominent Australian educators. These include topics such as that relate to ‘futures focused schools’, standards for school leadership and interpretations of research findings examining quality teaching and school leadership. It is telling that none mention gifted and talented education provision.

The visitor to the AITSL web site could be forgiven for forming the opinion that gifted and talented
education provision does not merit even scant consideration by educational leaders in Australia. These leaders include those who may set the standards for professional practice in our schools and who decide relevant professional development. Such a position may need to be re-examined if provision for these students is to change.

A second ‘meeting place’ for educational leaders in Australia is the Australian Curriculum, Assessment and Reporting Authority. It too has several documents on its web site. A scan using the word ‘gifted’ identified four files. Three are pdfs and the context of the word in each of these is summarized here

1. **Shape Paper Consultation Report** in May 2009. The word ‘gifted’ was used here to indicate that the ‘national curriculum will be developed to respond to the full range of students’ need, including gifted and talented students, Indigenous students, and students with disabilities” (page 10), that “ Feedback suggested a need for greater clarity about how national curriculum will be designed to meet the needs of the full range of student groups, including ….. gifted and talented students and ….(page 8).

2. **A report by Insync Surveys Pty Ltd** that analyzed feedback from educators to the draft curriculum for the four learning areas of English, mathematics, science and history from Kindergarten to Year from March to May 2010. The term ‘gifted’ is used 15 times, usually in comments that indicate that .. “Concerns were expressed across all learning areas that the curriculum does not take into account all students, nor allows teachers the flexibility required in teaching students with diverse learning abilities, from diverse backgrounds and from regional areas. In particular, gifted student, ESL students, students with learning difficulties or disabilities and those from low socio-economic backgrounds were considered to be disadvantaged by the draft curriculum. (page 19).

3. **In the Report on Trial School Consultation in July 2010**, the term ‘gifted’ appears thrice (on pages 47, 114 and 115), drawing attention to the need for possible improvements to cater for gifted students.

In summary, these data suggest that practical actions associated with implementing effective gifted and talented education provisions may not be uppermost in the decision making of those in positions of educational leadership in Australia.

This submission concludes with the recommendation that if gifted and talented students are to receive authentic equity in our education system, and if our Australian culture of the future is to benefit from their knowledge, it may be necessary to early to convince our educational leaders of its importance.

John Munro

**References**


The web sites for the various state gifted and talented policies: