Parliamentary Inquiry into the Education of Gifted and Talented Students

Gifted Education Report

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The Victorian Parliament's Education and Training Committee (ETC) has invited Monash University to express its views on the Inquiry, with particular attention to existing gifted and talented education studies, and other mechanisms to improve the capacity of teachers to identify and adequately respond to gifted and talented students.

Within the Faculty of Education, Monash University, there has been a concerted ongoing effort to develop, review, evaluate and expand studies available for teachers of the gifted and talented since a Certificate of Gifted Education was first instigated in 1996. The existing gifted and talented education studies aim to improve the capacity of teachers to identify and adequately respond to the educational needs of gifted and talented students.

Currently, the educational options in gifted education available to pre-service and post-graduate teachers provide a developmental structure for in-depth studies. These include:

1. Pre-service teaching elective in gifted education – EDF4512 Gifted education (6pt units)
2. Postgraduate Diploma in Education – all units in gifted education offered at Master's level (12pt units)
3. Master of Education specialising in gifted education:

   (All gifted education units are: 1. Offered on campus at Clayton, and 2. Offered for Off Campus Learning)

   - EDF6607 - Gifted Education: ID and Programming (12pt units)
   - EDF6613 - Advanced Studies in Gifted Education
   - EDF6610 - The Psychology of the Gifted Child
• A minor thesis in gifted education – equivalent to 2 units of study within M.Ed program (16,000-20,000 words)

4. In other Master of Education specialisations such as: early childhood education, Languages other than English (LOTE), inclusive and special education, mathematics and science etc., as well as in the generalist degree, teachers can elect to build on their studies with one or two elective units of study in gifted education.

5. Furthermore, teachers can choose to conduct extensive research in gifted education by enrolling in a higher degree by research. This can be in the form of a:

- Master of Education - M.Ed (thesis) - 2 units by coursework and a 40,000 thesis, or a

- Master of Education - M.Ed(thesis) – 60,000 word thesis, or a

- Doctorate of Philosophy (PhD) – 80,000-100,000 word thesis

An expanded perspective on the postgraduate course in gifted education and undergraduate gifted education unit offerings in the Faculty of Education, Monash University include:

The **Master of Education** course is designed to meet the needs of educators, educational administrators, managers, policy makers and others interested or involved in learning and education or working in the wider educational community, who wish to pursue studies at postgraduate level. Students choose from a broad range of units and have the option of completing a designated specialisation pathway. Students may also undertake a research thesis or professional project as part of the course.

*Objectives*

Upon successful completion of the Master of Education course it is expected that students will have:

• extended their knowledge, understandings and skills in educational research and practice
• explored both the theoretical and practical aspects of teaching and learning, whether in early childhood settings, schools, workplaces or other settings
• investigated and examined the nature of professional learning and develop deeper understandings of evidence-based practice
• explored the relationship between research and practice
• developed critical and analytical skills in discussing relevant and substantive research
• acquired knowledge about a range of research methodologies
Specialisation pathways - Students may choose to enrol in a series of units which make up a designated specialisation.* Some additional elective units may also be required, depending on the pathway chosen.

*Gifted Education is a Specialisation pathway:

Within the Master of Education the following units are available for teachers, psychologists, educational administrators, etc. to study the specialisation of Gifted Education. Each of the gifted units build on previous knowledge studied, yet the units can also be studied as stand-alone gifted education units. The more gifted education units studied, then the more informed the teacher becomes in order to provide for the diverse educational needs of the gifted and talented students in their classes. The gifted education units are rotated each semester, so that teachers can study them on a part-time basis. Students can also engage in the courses on a full-time basis. In addition, units of study are developed, so that pre-school, primary and secondary teachers can engage in the studies and still have their individual needs met as educators, whether they are new to the field or extremely experienced.

EDF6607: Gifted Education: Identification and Programming

In this unit of study the research literature on the nature of giftedness is examined. The implications of intellectual, social and emotional characteristics of gifted and talented students necessitating modification of learning experiences are explored. Identification procedures and materials used to select students for enriched and accelerated learning opportunities are investigated and discussed; while the research literature in regard to effective teaching strategies and resources appropriate for the differentiated classroom are examined and reviewed.

Objectives
Upon successful completion of this unit, students are expected:

- to be able to describe the nature of giftedness in terms of current conceptions and definitions of giftedness and talent;
- to be able to recognize behavioral characteristics of gifted and talented students;
- to be able to describe the types of instruments and procedures used for identifying gifted and talented students;
- to have an understanding of different learning styles of gifted students;
- to have an understanding of affective learning, character education and leadership;
- to have an understanding of how to differentiate the curriculum for gifted and talented students;
- to have an understanding of different types of 'acceleration';
- to be aware of a range of instructional models in educating the gifted; and
- to be able to recognize learning needs of diverse types of gifted students.

Between 1996 and 2011, approximately 30-35 students have studied this unit (on campus and off campus) when it has been offered for M.Ed study at Monash University.
EDF6610 - The Psychology of the Gifted Child

Psychological aspects relevant to the development and functioning of gifted and talented children and adolescents are examined. Topics include talent development, self-actualization and the interplay between creativity, thinking skills and the structure of intelligence. Other issues addressed include: procedures for counseling gifted students and their families.

Objectives
Upon successful completion of this unit, students are expected:

- to be able to demonstrate basic knowledge of psychological aspects of gifted students, creativity and procedures for identifying these characteristics in children;
- to have knowledge and understanding of the social-emotional development of gifted and talented students;
- to have an understanding of basic issues in counseling gifted children and their families;
- to have an understanding of major approaches to education of gifted and talented children in relation to their social and emotional needs.

Since 1999-2010 approximately 40-50 students (on campus and off-campus) have studied this unit each time it has been offered for study in the Master’s cycle of education.

EDF6613: Advanced Studies in Gifted Education

The research related to the nature of specific talents, and procedures to identify these talents are examined. The nature of creativity, its assessment and strategies for development; the variation between the special populations of the gifted in respect to their needs and development are explored and discussed.

Objectives
Upon successful completion of this unit, students are expected:

- to be able to describe the nature of specific talents and procedures to identify them;
- to be aware of the differing views of creativity and its assessment;
- to be able to apply the process for developing a mentoring program;
- to have an understanding of the needs, identification procedures and development of young (pre-school) gifted children;
- to have an understanding of the needs and development of prodigies and children with exceptionally high intellectual potential;
- to have an understanding of gifted children with learning disabilities in relation to their needs, assessment and appropriate programming procedures;
- to be able to identify gifted girls and gifted boys (giftedness and gender), and have an understanding of their needs in order to realize their potential;
- to have an understanding of key issues in addressing the needs of gifted children with sensory or physical disabilities; and to be able to identify and provide for the needs of gifted under achievers; and
to have an understanding of the social and emotional development of gifted children and strategies to support their individual needs.

Since 1998-2011, approximately 30 students have studied this M.Ed unit each time it has been offered for study on campus and off-campus.

Pre-service gifted education unit of study: EDF4512 - Gifted Education

This unit of study provides a framework for students to understand giftedness and the practices associated with gifted education from a theoretical perspective, and through the assessment tasks provides opportunities for both critically reflective appraisal and practical application of new understandings. It requires students to critically examine current understandings and practices relating to teaching highly able students from a national and international perspective. A focus of the unit is on development of differentiated curricula to engage all ability levels and gifted students in particular.

Objectives
Upon successful completion of this unit, students should be able to:

1. examine their beliefs about giftedness and gifted behaviour and critique these in relation to research findings;
2. identify issues and practices associated with identification of and provision for gifted students;
3. reflect on and evaluate the theory and practice relating to pedagogical and organisational strategies associated with the field of gifted education;
4. interpret and utilise models used in a range of national and international settings to cater for gifted student; and
5. explore and develop differentiated instructional strategies and curricula which challenge a range of abilities and are suitable for mainstream classroom.

Teacher education relating to gifted education at Monash University.

EDF4512 Gifted Education is offered as both a Core elective in the Bachelor of Education (secondary) education program and a General elective in the Bachelor of Education (primary) program and Grad Dip Ed (Professional Dev St) program (both through Monash Distance Education and Open Universities Australia). This unit has grown in popularity from an initial enrolment of 142 in 2008, rising to 159 in 2009, 180 in 2010 and already 130 have completed the unit for semester 1 in 2011, with semester 2 numbers still to be added. This means that in four years more than 600 pre-service teachers have completed a unit in gifted education. Yet as this unit is only an Elective, there are many who leave Monash Education programs without any preparation for teaching highly able students.

Since this unit began in 2008, Dr Margaret Plunkett & Dr Leonie Kronborg who teach this unit, both senior lecturers at Monash and experts in the field, have been conducting a research project examining the impact on attitudes of students who undertake EDF4512. Research suggests that specific education enhances attitudes and practices that are conducive to appropriate provisioning for gifted students (Copenhaver & McIntyre, 1992; Feldhusen, Haeger & Pelligrino, 1989; Geake & Gross, 2008; Gross, 1994, 1997;
Korynta, 1982; Kronborg & Meyland, 2002; Plunkett, 2000). Furthermore, attitudes impact on practice attitudes and are influenced by a greater understanding of the specific characteristics and learning needs of highly able students.

So far approximately 330 students have been involved in the research completing pre and post attitudinal surveys with findings showing statistically significant changes in a positive direction in relation to gifted students and gifted education. The statistical data indicated strong positive changes in all areas covered by the survey, but particularly in relation to acceleration and ability grouping. Students were also asked to provide qualitative reflections about their responses to the survey and in particular the areas where their opinions had altered. The two data sets offer a valuable insight into the areas where student opinions had either strengthened or changed, with reflections suggesting that access to research and literature on giftedness had rarely been encountered in their Education courses and yet had been instrumental in assisting them to challenge their previous opinions, many of which they now viewed as uninformed misconceptions. The findings of this project are ready for publication in an international journal.

A particularly interesting outcome of the project was the reflection provided by the students in relation to the need for such a unit to be part of the core of teacher education programs. A sample of the many similar comments is included below.

"After completing this unit and acknowledging how little I actually knew about how to cater for gifted students I really feel sorry for my peers who have not had the opportunity. It was only a fluke really in that this is one of the few electives offered in semester 2 that I chose it. Now I am SOOO grateful that I did and can't believe that it is not part of our core program"

"I still find it amazing that this elective is not compulsory – I have learnt so much in it – I don't think giftedness was even mentioned during the first 3 years [of my degree] so I would certainly have been blissfully ignorant of any gifted students in my classes or of what to do for them. I still don't feel confident that I would know it all but I am much better off than students who didn't do this elective".

"It blows me away that this is only an elective – it definitely needs to be a core unit. Looking at the changes in my attitudes I can't believe how little I knew about gifted students and I was one myself! I just feel that I am much better prepared now".

"This elective should be compulsory for ALL students – my mentor [teacher] keeps asking me about what I am learning in it as she says she has no idea and thinks it is great that I am doing it at uni”.

I am really grateful that I chose this unit but can't believe it isn't compulsory – I have told all my friends to make sure they do it as otherwise they won't have any idea what to do if they get a gifted kid in their class. My mum is a teachers and she is amazed at what I tell her – she has taken a few of the readings to her school for the staff and even asked my advice about one of her students who she now thinks might be gifted".
Research which informs the education of gifted and talented students:

The development of a field of research in regard to the educational and psychological needs of gifted and talented students in Australia is extremely important if we are going to be able to improve our knowledge and understanding of gifted and talented individuals and also to improve on their educational provision. Additionally, Australian academics and educators in gifted education need to be able to contribute to the international educational debate on issues related to identifying and educating gifted and talented students. Research opportunities are open to Victorian, Australian and international teachers and psychologists on topics of gifted education in the Faculty of Education at Monash University. The importance of scholarships to enable educators to engage in higher degree research is a significant factor for this research to continue to grow.

The following examples of research conducted on diverse aspects of gifted and talented education have been completed by high achieving students in the Faculty of Education. This original research in the field of gifted and talented education stimulates debate on issues and is critical for the field of study. Some of these studies have been further disseminated to the public by publications in refereed journals, presentations at state, national and/or international conferences, and invited presentations at international seminars/conferences:

Bachelor of Education (Hons) thesis:

- An Investigation of the Differentiated Teaching and Learning Strategies Utilised in High-Ability and Mixed-ability Grouped Year 7 Classes – Felicity Urquhart

M.Ed. Minor theses:

- Changes in Post-Graduate Teachers’ Opinions Toward Gifted Students – Jean Meyland
- Investigating Using Information and Communications Technology with Gifted Learners – Kathryn Harrison
- An Exploration of Thinking Strategies Used By Gifted Students Aged 8 and 9 Years. Noeleen Vincent
- Early Childhood Professionals and the Gifted and Talented Students – Jane Ward
- Characteristics, Competencies and Classroom Strategies of Effective Teachers of Gifted and Talented Students – Susan Knopfelmacher
- A Discourse Analysis of Brunei Darussalam’s Primary Four Mathematics Curriculum for Brunei Darussalam’s Primary Four High Ability Students – Aida Mohd Noh
- An Investigation of Secondary Teachers’ Beliefs and Practices in Science and mainstream Schools In Brunei Darussalam – Norhidanajibah Binti Tompal
- Teacher and Student Perceptions of a Mentoring and Inquiry Learning Process Used to Extend Upper Primary High Ability Students – Mark Smith
• High Ability Students’ Perceptions of the Impact of Gender and the Learning Environment in a Select Entry Accelerated Learning Program – Kate Mitchell
• Perceptions of Learning in a Select Entry Accelerated Learning Program – Yvette Kaman

Master of Education (HDR) thesis

• What Are Parents’ Perceptions of the Diagnostic Process and Educational Experience in Relation to their Child Identified as Gifted with Asperger’s Syndrome? A Qualitative Case Study – Marie Lockyer

Masters Degree of Child and Educational Psychology students – minor thesis

• The Characteristics of Giftedness Scale: A Tool for Identifying Gifted preschoolers – Christoula Noutsis
• How Mathematics Motivations and their Social Antecedents Impact Girls’ Senior High School and Career Choices Related to Mathematics - Caroline Findlay

Postgraduate Diploma of Psychology minor thesis

• An Investigation of Patterns of Gifted/Learning Disabled Children’s Profiles - Amanda Kok

Doctorate of Philosophy (PhD)

Plunkett, M. (2006). Tales from the Pond: Student perceptions of grouped and mainstream learning environments


** In 2011, in addition to these reported studies in gifted education there are further Australian studies currently underway. These include 3 PhDs, 4 M.Ed (HDR), and 6 Minor theses.

University based development of student research in gifted education facilitates a significant contribution in gifted and talented education in Victoria. This research stimulates original thinking in the field of gifted education and contributes to international development of the field of gifted education. Furthermore research in the field from experts provides development of new knowledge and leads to development of practice.

Publications related to Australian research conducted in gifted education from academics at Monash University


**International Conference Publications: Full paper, Editorial Board**


Kronborg, L., (2009) "The Importance of Teacher Education, the Teacher, Identification, Educational Placement and Curriculum in Gifted Education". Invited paper presented at "The Development of Special Education in the Context of Inclusion Forum", School of Preschool and Special Education, East China Normal University, Shanghai, China.
Kronborg, L., (in press) 'Positive Parenting and Teaching to Develop Individual Talent'. Invited paper presented at Fifth World Congress of Childhood Talent in the Third Millenium, ELIC Foundation under the auspices of UNESCO, Santiago, Chile.


International Conference Publications: Abstracts.

Kronborg, L. (2010) "What contributes to talent development in eminent women?" A paper presented at the 57th National (USA) Association for Gifted Children, Atlanta, USA.


Plunkett, M., Kronborg, L., & Pilbrow, J. (2009)"Impacting on pre-service teacher attitudes towards giftedness and gifted education: Can a semester make a difference?" Paper presented at18th World Conference for Gifted and Talented Children, Vancouver, Canada.


National Conference Publications: Full paper, Editorial Board


National Conference Publications: Abstract


Books/CD Rom


International Conference Publications: Full Paper, Editorial Board


**International Conference Publications: Abstract**


**National Conference Publications: Full paper, Editorial Board**


**Funded Research Reports – Two major research studies in gifted education which have impacted the field so far, were conducted by Dr. Kronborg and Dr. Plunkett, 2004 & 2005.**


**Equity and Access:**

All gifted education units of study offered at Monash University are available for students to study on campus and off-campus. Off campus includes students from anywhere across Australia and internationally.

Eg. Level: Undergraduate

**EDF4512 Gifted Education**

- Faculty of Education, Monash University
- Clayton First semester 2011 (Day)
- Gippsland First semester 2011 (Day)
- Gippsland First semester 2011 (Off-campus)
- Gippsland Second semester 2011 (Off-campus)
- Gippsland First semester (Open Learning) 2011 (Open Learning)

Eg. Level: Postgraduate

**EDF6607, EDF6610, EDF6613**

- Faculty of Education
- Clayton First semester 2011 (Off-campus)
- Clayton First semester 2011 (Evening).
Professional learning seminars for teachers in gifted education have also been provided at Monash University, Berwick Campus in 2010.

Geographically, Monash University has aimed to provide teacher education and professional learning experiences for teachers in gifted education at Clayton Campus, Gippsland Campus and Berwick Campus as well as an Off Campus Learning (OCL) option for interested teachers. Students from Peninsula Campus tend to attend gifted education classes on campus at Clayton or do studies off campus.

**Research in gifted education and talent development**

Furthermore, postgraduate research supervision in gifted education is available for all on campus students and off campus students across Australia and internationally if students meet requirements for study at Master’s and PhD level.

There is a thoughtfully articulated developmental structure of studies in gifted education which exists currently in the Faculty of Education, Monash University. This structure of units of study within courses provides opportunities for teachers to gain knowledge at a pre-service level, developing at a Master’s level and finally providing opportunities for the most dedicated to complete their own original research in the field. Teachers in Victoria and beyond have opportunities to engage in current evidence-based learning in the field of gifted education at Monash University, if this is their choice.

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