Inquiry Into the Education of Gifted and Talented Students

Tournament of Minds (Vic)



30 May 2011

"Some men see things as they are and say why.

I dream things that never were and say why not."¹

We don't seem to know whether the author of this quotation was classed as a gifted student but we do know that his education was irregular, due to his dislike of any organized training.²

Nevertheless, we recognise the impact of visionary ideas; the ability to perceive and implement outcomes that are "outside the square".

Albert Einstein classed himself as a mediocre student, yet we stand in awe of the way he changed our view of the world.³

Tournament of Minds⁴ *is dedicated to increasing the chances of success that, as a society, we capture and grow the gifts and talents of as many students as possible.*

We believe that the first requirement for achieving such an outcome is that we value, reward and celebrate intellectual excellence, creativity and originality. The second requirement is the recognition that this is a team endeavour - the enormous challenges facing our world require us to learn how to work in teams.

Together Everyone Achieves More

Therefore, we promote a team activity that thrives on overcoming challenges and values creativity, originality, diversity, respect and encouragement in addressing challenges across the spectrum of science, technology, arts and humanities.

It is in this context that we wish to make this submission to the Victorian Parliament's Education and Training Committee's Inquiry into the Education of Gifted and Talented Students.

¹ George Bernard Shaw as quoted by Ted Kennedy at Robert Kennedy's funeral as a statement often made by his brother.

² From Nobel Lectures, Literature 1901-1967, Editor Horst Frenz, Elsevier Publishing Company, Amsterdam, 1969.

³ The Real Einstein, Roberto A. Monti and Geradina A. Cesarano Monti.

⁴ A brief history and outline of Tournament of Minds is given below.

Response to Terms of Reference

- the effectiveness of current policies and programs for gifted and talented students, with particular consideration of, but not limited to:
 - identification of gifted and talented students;
 - equity of access to quality educational choices for gifted and talented students and their families; and
 - impact on the learning, development and wellbeing of gifted and talented students;
- the scope, coverage and effectiveness of current policies and programs for students from both metropolitan and regional school communities, school leaders, teachers and parents and carers to support gifted and talented students;
- opportunities and strategies for enhancing support for gifted and talented students, their parents and carers, teachers and school leaders; and
- opportunities for improved educational offerings for gifted and talented students through collaboration across all school sectors and with community, business and industry.

Tournament of Minds would like to propose that the majority of students are gifted and talented in some area(s) and that this should be the assumption behind the policies and programs. Therefore, it is very important to recognise, value, acknowledge and celebrate gifts and talents right across the field of human abilities. It is particularly necessary to counter-balance the current emphasis on individual and sporting skills by increasing the recognition given to teamwork and intellectual skills.

Tournament of Minds would like to propose that the most effective method of enhancing support for the gifts and talents of students is by having their peers discover and recognise these gifts and talents particularly by facing difficult challenges together in a team environment.

Tournament of Minds would like to propose that the incorporation of intellectually and socially challenging team activities, like Tournament, into the curriculum and these can be tailored to address real community, business and industry challenges.

Tournament of Minds would like it recognised that gifts and talents are not static attributes that do or do not exist. Selection of a minority can lead to talent development of a few but the loss of far more. Possibly the best example of this was the discovery that the majority of the top Canadian ice hockey players were born in the first few months of the year and almost none from the last months.⁵ It appears that the reason was that players were grouped by year of birth. Selection for the better teams and additional training, encouragement and rewards was then biased because the players born early in the year were older and slightly bigger, stronger etc.⁶

⁵ Malcol Gladwell, *Outliers: The Story of Success*, Little, Brown and Company, 2008.

⁶ L. B. Sherar, A. D. G. Baxter-Jones, R. A. Faulkner, K. W. Russell. *Do physical maturity and birth date predict talent in male youth ice hockey players?* Journal of Sports Sciences 2007, 25(8), pp. 879 - 886

Response to questions re the current practices of Tournament of Minds

Programs offered by Tournament of Minds to gifted and talented students

- programs we currently provide to gifted and talented students;
- our experience and issues surrounding these programs (including for example responding to negative attitudes towards giftedness);
- the experiences of students participating in these programs;
- our views about how the concepts of 'giftedness' and 'talent' should be defined;
- mechanisms to improve the capacity of teachers to identify and adequately respond to gifted and talented students; and
- any broader implications for school communities arising from the education of gifted and talented students.

Tournament of Minds (TOM) began in Victoria in 1987 as a program that allowed gifted and talented students to participate with other like minded students in an atmosphere that encouraged creative thinking, problem solving and performing arts.

Tournament of Minds objectives are:-

- To provide the challenge of real, open-ended Challenges
- To develop creative problem solving approaches and techniques
- To foster cooperative learning and teamwork
- To promote knowledge & appreciation of self & others
- To encourage experimentation and risk taking
- To expand and reward creative and divergent thinking
- To stimulate a spirit of inquiry and a love of learning
- To develop enterprise
- To celebrate excellence

In the following years, TOM grew to become both a national program and also one that readily encourages international students and schools to participate in our annual culmination of events, our Australasian Pacific Finals, conducted in capital cities around Australia.TOM is unique in its blend of using creative and critical thinking skills, problem solving strategies and cooperative learning, with an emphasis on teams rather than individuals, to present a solution to an open ended challenge in a dramatic and audience engaging format.

• Programs provided by TOM

As well as the problem solving component of TOM, there has been in place for a few years an extensive student incursion program into schools, and a professional learning program which we take into schools where we work with teachers to provide a learning experience that allows students of all ages to develop many of the skills encompassed in our TOM objectives.

TOM also strongly believes in the support of teachers who facilitate our program in their schools. To allow teachers/facilitators to deliver a stronger and better experience to their students, we run facilitator workshops.

The workshops give facilitators a chance to learn about the program through our Introduction to TOM sessions, which are essential for teachers new to the program as well others such as our Spontaneous challenge workshop as well as our more broad based. Thinking Skills workshop. Our belief is that by sharing our TOM knowledge, strategies and resources we can model for teachers how to use and add to their existing skills, giving students more varied approaches to deeper learning experiences. As a result, the teacher gains the confidence to guide their whole class, not just their TOM students. By assisting teachers to rethink how they teach we are helping students around Australia to learn in a myriad of ways.

• Experiences and Issues

There are many issues that prevent all Victorian students having equitable access to programs or incursions such as the constraints on school budgets, the overcrowded curriculum and the perils of distance. There is also a lack of information within university education faculties to help educate pre-service teachers on the recognition, opportunities and strategies that exists for our gifted and talented students. TOM in recent years has tried to address these issues by offering student incursions and facilitator workshops across Victoria.

TOM involves teams of seven students across year levels from year 4 to year 10 competing in either secondary or primary divisions .They work within a six week block to solve a challenge from one of four categories- Maths Engineering, Language Literature, Social Sciences and Applied Technology. The solution is presented within a 3x3m square in a drama format of no more than 10 minutes. There are strict guidelines for costumes, props, presentation skills, costs and outside assistance by well meaning but often interfering adults and other helpers. The aim is for the students to solve the challenge by themselves with the teacher acting as mediator, guide, manager and trainer.

Over the years, we have found that the experience for all involved allows a freedom of choice, depth of understanding and social networking that goes far beyond the immediate classroom and can heavily influence the teaching and learning of both student and teacher. The open ended nature of the challenges and the chance to "show all that they know" (John Munro) has seen students continue their involvement in many forms and become strong advocates for the program and all that it has to offer.

• Experiences of students

Tournament of Minds was originally designed to satisfy the need for a program for teachers of students who were recognised as gifted and talented. Today, students from all sectors, with a wide range of learning abilities find that TOM provides opportunities to work with like minded individuals, who are not necessarily in their age or year level or peer group, within a "safe" environment where risk taking and unorthodox thinking is encouraged. The gift of being able to work on a specific topic or interest over an extended period of time is a valuable learning opportunity that our students enjoy. TOM's demand that the solution be open-ended and presented by a team of seven in a drama format ensures that the students are focused to work within a team situation to solve problems creatively. It is through this process our teams can develop leadership skills, team work, tolerance of others

points of view and experience the challenges of working as a team and achieving a goal, both highly valued skills in the 21st century.

Our students are the main reason that the program exists today, below are comments from student participants :-Tournament of Minds is a great, fun and enjoyable program for schools. I found TOM helps your academic levels in English and Mathematics. TOM also assists with your public speaking, social skills and team building abilities that enhance your thinking process.

I would recommend Tournament of the(sic) Minds to any Secondary College student no matter what academic level because it is memorable for future years, as it was for me. I found with my experience (over 4 years) that I made friends who I still communicate with to this day. I also found that each year the challenges especially in the maths engineering categories changed completely. One main aspect that I found with Tournament of the Minds is that it gave me a big boost of self motivation and self confidence when you see all your hard work come to completion and is shared with all of the groups. **Marcu**s

I was in TOM for 4 years and just loved it. I always did the Maths/Engineering problem - my mates and I loved making stuff. I've been a facilitator for the last 2 years and enjoyed the opportunity to be involved in a different way. TOM was an opportunity like no other - it was the highlight of the year for me. We all loved the trip to Bendigo each year. The 6 weeks of after school /weekend practices were great - we always looked forward to them because we always got to have hot chips before we started (our indulgence). It was also great to do our presentations to our parents the day before going to Bendigo. I'm not sure that I'll be able to be involved this year because of my work hours and feel sad about this, but I've already talked to year 7s about what a great experience TOM is.

I was sort of roped into TOM in year 7 by some year 10s and am so glad I was. I was involved every day and really loved being seen as a leader last year, as a year 10 student. I'll definitely be a facilitator this year. The best thing about TOM is the chance to work with kids you wouldn't normally work with. Our school allows students to self-select and I'm very grateful for this - I don't think I would have been picked by teachers when I was in year 7 because I was very rough around the edges! I loved the whole experience and TOM was certainly a highlight each year. **SM** (female)

I'm 25 but still talk to kids about my involvement with TOM every year, for 4 years. I was in our first ever TOM team and only took part because of a certain pushy teacher. I was very, very quiet and didn't have any friends. My teacher talked me into taking part - said she couldn't run the team if there weren't 7

team members (I was no 7) and I just believed her. She also assured me I could have a non-speaking role. Well that didn't happen, did it! Surprisingly, I started to speak up more and more each week (it was easy because everyone was so supportive - I really looked up to the 2 year 10s). Every year, I took on more and more of a leadership role and when I was in year 11 and 12, I was a facilitator. I gained so much self-confidence through TOM and I've always encouraged younger students to take part when I've visited the school (I live in SA now). The kids always say they can't believe that I was ever an almost non- speaker up until year 7. My parents were thrilled when they couldn't shut me up after years of trying to get me to talk. Going to Bendigo that year was also my first ever trip away without my parents and this gave me the confidence to take part in the year 8, 9 and 10 camps. **MM** (female)

I participated in the program from Grade 5 through to Year 10 (so 6 years) as a student. Once I was too old to participate, I facilitated teams with other teachers at my high school and also began to judge. Once I finished high school I joined the Lilydale Regional Committee and then the State Committee - so in total I have probably been involved for 15 years!

My most memorable moment would be making the National Finals in 2001 and travelling to Tasmania to represent Victoria for Language Literature. I was in Year 10 so it was my last year to participate so making the National Finals was the icing on the cake. The atmosphere at all the events was amazing and everyone had so much energy and excitement. It was a great team building exercise and I am still friends with my team mates today. Even though we didn't win I still look back at that trip with very fond memories.

I feel that TOM offers many things that are different from the regular school experience:

- opportunity to work in a team/group with a genuine outcome and goal. Many school based teamwork activities are lacking in value and meaning - they seem to be token gestures and students know this.

- self guided learning. As students are required to do the all work themselves without any outside assistance this offers the opportunity to develop leadership, group work skills, time management skills and multitasking.

- the learning from TOM can actually be applied to real life. The skills are those that students will use in further study and in the workplace. I was able to develop leadership skills, public speaking and presentation, time management and the ability to work well with others (even if you don't get along with the others in your team)

- the chance to work closely with students from other year levels. Many schools do not have programs which require students from Year 10 to work closely with students from Year 7.

- the thinking skills required in TOM are very different from those required in the classroom and TOM provides an opportunity to develop creative and lateral thinking.

- a sense of accomplishment at the end of the six weeks

I feel that my participation in TOM has made me who I am today. Prior to participating in the program I was painfully shy and struggled to interact with others. Being forced to work closely with others and also to publicly present my solution made me overcome those fears. When I graduated from University and was applying for jobs, many of the interview tasks involved public speaking and team work. Upon starting my first graduate job, I was told that I was hired because I had excellent communication and presentation skills, I could work well in a team and lead without being too dominating, I was able to use my time effectively and was able to get along well with the other candidates. Whilst I am not saying that I would have failed without TOM, these skills were all developed through participating in TOM. I also feel that the creative and lateral thinking that was encouraged in TOM has served me well since leaving school. Facilitating teams taught me patience but also made me realise that I thoroughly enjoyed working with students. My continued involvement with TOM through the Lilydale and State Committees has shown me what it would be like to work with schools and students on a permanent basis and has also allowed me to interact with teachers on a regular basis. Watching the students present their solutions, I never cease to be amazed at what they can come up with. I see students having a great time while learning and actually enjoying school! These were key factors in my decision to go back to University to get my Masters of Teaching (Secondary) - which has been the best decision I have ever made! I feel that having been involved in the program has helped to shape my view of schooling and education, and the ways in which students learn. It provides me with confidence as to what students can achieve and I feel that the program has so much to offer students today. LH (female)

Feedback from a parent and past committee member:-

I don't come from an education background, having joined the Tournament of Minds committee on more of a secretarial basis originally. However, I can say that I found all of the Tournaments a thrill to be involved in and, from an outsider's point of view, could feel the "buzz" gained by the children involved. It was fantastic to see groups of young children working together in a team environment and so proud of their achievements. What also fascinated me in watching different performances on the day was that each team had been given exactly the same problem and yet they all tried to solve the problem from different angles and so no two performances were the same.

The Tournament appeared to me to be a two-fold asset. It gave children who were looking for something extra in the curriculum a chance to get their teeth into a meaty problem and "solve" it, and also the chance for students to work in a team environment where a consensus needed to be reached at the end of the day – where ideas needed to be shared – where one learnt to listen to others, take on board their ideas and then together come up with an accepted solution.

Even though I believe Tournament of Minds was perceived by some as being an activity for "gifted and talented" children and perhaps in some people's eyes "elitist", I always saw it as an opportunity for any child to become involved as long as there was support from the school and from parents – the chance to use whatever "skill" the child may have, whether it be singing, dancing, creating poetry, building backdrops, painting, acting, creating costumes out of nothing. Each child had something they could give to the team and together they could create. **JP**(female)

• Concepts of giftedness and talented

An exact definition is difficult as recognised educational experts such Francoys Gange and Robert Renzulli have some difficulty in producing clear definitions of gifted and talented. The generic term "gifted child" is one who performs above their peer group in one or even many ways such as academic ability but recognition must also be paid to the sporting gifted. Special mention must also be made of the child who is gifted in the affective area and who shows great sensitivity to others and the world around them.

For many gifted students, their knowledge is important and the ability to show it is valid. However, in a world where the ability and need to read and write to display your knowledge is the most important way for teachers to assess knowledge, the verbal gifted or the learning-disabled gifted are faced with a frustrating selection of methods in which to display their knowledge.

TOM allows these children to reinforce their place in our world and gives them the ability to demonstrate their abilities by working with others who are very often just like them. The opportunity to learn and socialise is crucial for all children especially for those who struggle with the social component of the class and yard. Thus the chance to "show off" to an audience of highly appreciative people allows the gifted student to exhibit his knowledge in a safe and fun way with a group of like minded individuals. This motivation to perform for the gifted child can only enhance their learning opportunities in social and academic fields and has given many students over the decades, the sanctuary of knowing that there are people just like them and they are not 'alone' in the world.

The definition of a gifted or talented child is dependent upon many variables, the least not being the literature you have access to. Over the decades, as experts carry out further research and develop greater understandings, we have come to realise that the terms must not just refer to measurable intelligence such as that assessed through IQ tests but must also include the level of creativity, the level of commitment to a given task (especially when the task has the student engaged) and the chance that every one of us has been given through our families and environment. As a result, what matters most is not how we define a gifted child but the opportunities, conditions and actions that we provide to allow them to find their pathway to excellence.

• Mechanisms to improve the identification and response to gifted and talented students

Just like finding a definition of gifted, it is just as difficult to outline the mechanisms needed to deal with them. Many teachers are a "voice in the wilderness" especially at secondary schools where the capacity and willingness to cater for these students are hampered by curriculum needs and the scorn that the label attracts. Further to this, is the marketability of such responses within certain socio-economic areas so that a school can be seen to be providing programs that cater for the gifted.

TOM has always seen our program as being beneficial to all students as when we cater for the upper echelon of our students, the flow on effect is advantageous to all. To provide access to programs in regional and metropolitan areas is important and out-reach programs can allow students in all educational sectors to experience the Tournament outcomes. TOM provides for many students a talent development service where their ability is recognise and through participation in the program, fostered, so that a child who is gifted in a relevant domain is able to achieve their fullest potential and become talented. For many of our students, to realise a previously unknown gift and the chance to develop it leads to finding their niche within the workplace and their role as an adult. Thus, for example, the chance to participate in the Maths Engineering challenge of TOM realises their gifts in the engineering and design field and thus may lead them onto engineering degrees and employment. One past TOM participant recently notified us that he was working as a design engineer at the Ford Motor Car Company in Germany.

In the challenge of promoting and developing higher order thinking skills and creative problem solving, the education of our teachers especially at the pre-service level is essential. By starting at the grassroots, we have a chance to inform and disseminate knowledge on what a gifted, talented or simply highly engaged student is interested in, what their knowledge is and looks like and how to adapt the curriculum so that our students are given vigorous, challenging and open ended content. We can attempt to provide our pre-service teachers with the right knowledge by ensuring that gifted and talented education is addressed in compulsory units that extend for at least a semester/term. Here organisations such as TOM could come into universities and discuss their programs and show what is available. As well, the recognition, influence and availability of the existing experts within our universities to undergraduates would be beneficial.

It would be interesting to ascertain in 2012, how many of our university Education Faculties have a dedicated gifted education degree at post-graduate and doctoral levels?

Another key component is the knowledge of how to differentiate curriculum and content so that gifted students are allowed to experience inquiry based learning, organise the learning pace and content themselves, show a depth of understanding and transfer knowledge. To follow your interest and passion is important to all of us but in a world where the right answer and sometimes only answer is expected and you are not allowed to show other ways to get there, frustration can become a constant.

• Broader implications for schools communities

When we cater for the needs of the gifted child, we are ensuring that they are given a chance to be engaged. When we teach teachers how to cater for and recognise these students we are giving insights into the world of the gifted and by changing a teacher's terms of reference, we are allowing them to disseminate knowledge to their peers and students- they become the "expert".

For many of these students, their needs may not have been met as they may be the underachiever, the misbehaved or even the well behaved. As well, for many teachers, the able and gifted are seen to be able to cope and "good kids" are easy to teach, do not create problems in the class and generally meet the demands of schooling. These students can hide in schools and are rarely academically challenged. For all of these reasons, we need to ensure that our teachers are given the necessary skills, knowledge and strategies to "deal" with the gifted as when we cater for the top ten percent of our student population, the flow on effects to the rest of the class can only benefit all students.

To allow a child to achieve success in all facets of her life we need to provide a wide variety of opportunities including educational ones as a successful adult has had the intellect, aptitude, non intellectual traits such as leadership, environment and chance to acquire excellence in the "public eye". The range of opportunities should not be met by only the school but by a host a programs that allow a child to experience all that is available so that many facets of their talents are challenged. To do this requires money, time, knowledge and acceptance within a school environment.

Tournament of Minds is just one of the possibilities that a child may encounter through their schooling and if they have a committed school, teacher and family, they gain so much more than the chance to participate in a program that "ticks the box" for the provision of a gifted activity within a school. Schools may need encouragement to acknowledge that their students need identification and assistance as being gifted is not exclusive and by working with educational professionals and practitioners, parents and the children we can grasp what is needed to cater for their abilities. We need to give our students the chance to develop higher thinking skills- a vital component of the VELS curriculum- as well as the possibility of participating in an activity that allows them to represent themselves, their school and state at a competition. Thus, for the student who is challenged by sport, this potential is often the highlight of their participation.

Our gifted students also need access to programs and resources to foster and acknowledge their talents. This could be made possible through the provision of mentoring programs that allow the students to experience their special field of interest such as engineering or drama or literature in a real life setting. Higher education facilities could assist as could companies thus allowing them to see the talent available in schools and perhaps even "head hunt" their future students and employees.TOM could provide the opportunity for universities and workplaces to identify and develop gifts through focused and advanced experiences such as that already present in the Schools Technology Project(Monash University). Projects such as these could allow for greater mentoring

and engagement from both the child and the mentor's perspective, a "win win" situation as the child finds a person with similar knowledge and the mentor gains access to better communication and ways of doing.

To assist with the cost of supplying student incursions it would be useful to subsidise a program where consultants are able to travel to the regional areas for an extended period of time thus engaging a large number of students across all educational sectors. This would then assist in providing teachers with teaching and learning opportunities to become better equipped for the learning that our gifted students demand and need. Further to this would be the program where teachers are assisted through a funding agreement where relief teachers would be supplied to interested teachers and schools thus allowing them to attend all relevant professional development within school hours. For a school, this then allows the establishment of a home expert in the provision of a gifted program without the combined expenses of providing a casual teacher as well as that of the inservice.

On behalf of Tournament of Minds (Vic) Geraldine Nicholas PD Coordinator Tournament of Minds Peter Lamb Geelong Director Tournament of Minds

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