Conference Highlights *by Val Gravelle*

In April, ABC held our annual conference. It was an honour to have Dr. Karen B. Rogers as guest speaker for the two day event; the first day she directed her presentation towards educators of the gifted; and the second day towards the parents of gifted children.

Dr. Rogers is a foremost researcher in the field of gifted education. She is Professor of Gifted Studies in the Department of Curriculum and Instruction at the University of St. Thomas in St. Paul, Minnesota. However, she is currently a visiting professor and Director of Research at GERRIC/ The University of New South Wales in Sydney, Australia. In 1991, she completed *The Relationship of Grouping Practices to the Education of the Gifted and Talented Learner: Research-based decision making*, an evaluative synthesis of hundreds of research studies on the effects of ability and achievement grouping. In 1992, she was honoured with the Early Scholar Award of the American National Association for Gifted Children for this work. Karen is one of the world's leading authorities on the development of differentiated curriculum for gifted and talented students. Having authored two books (*A Menu of Options For Grouping Gifted Children* and *Re-Forming Gifted Education: How Parents and Teachers Can Match the Program to the Child*), she is about to release her third, *Educating the Gifted in Mainstream Schools*. She has published over 80 articles about gifted and talented students and is the founder of OMNIBUS, an enrichment program for primary gifted children. Additionally, Dr. Rogers is also the mother of three gifted children and the grandmother of five (potentially gifted) grandsons. For those who were present to hear her speak, I am sure you would all agree, she has a formidable knowledge base and offers tremendous insight, reassurance, and inspiration. She is clearly a leader on many levels in the field of gifted education.

Dr. Rogers has formulated a structure and recommendations for what evidence-based research indicates parents should expect from the schools that are charged with educating their gifted children. The following highlights are from her conference presentation on this subject.

The Information You Need to Bring to the Schools….

Parents should develop and maintain a detailed record of their child. This record should include specific information about cognitive abilities and performance and incorporate a list of any tests administered noting the dates and specific results (in particular, any results that fall within the 90-99th percentiles). This will allow you and your child's educators to see any patterns that may exist.

Also of critical importance, is any information that parents can gather that will provide specific information on personality traits, behaviour characteristics, learning strengths, interests, and attitudes. There are useful tools in Dr. Roger's book that can assist with this. Behaviours that are less easily documented could be videotaped. A parent can keep an ongoing journal of reflections on their child's creative and critical thinking achievements as well as keeping work samples that are good representations of their child's abilities.

A record should also be kept of enrichment activities that your child has participated in and a list of books that your child has read noting the approximate age at the time. Note books that have been read repetitively as well because this can help ascertain preferences and patterns.

All of this information can be recorded in a table with headings as follows with some examples of topics to cover in each column shown.

Cognitive Functioning	Learning Strengths	Learning Preferences	Interests
Objective Measures ● Cognitive Assessment Dates & Results ● Achievement Test Dates & Scores **Subjective Measures** ● Parent & Teacher Checklists ● Report Card Comments ● Other	**Parent Input** ● Intellectual ● Academic ● Creative ● Social ● Arts ● Personal **Teacher Input** ● Academic ● Intellectual ● Social ● Etcetera **Achievements** ● ● **Enrichment Activities** ● ●	**Subject Areas** ● Talent Area(s) **Learning Styles** ● Group Learning ● Individual Learning ● New Learning ● Old Learning ● Lecture ● Discussion ● Peer Learning ● Drill & Recitation ● Projects ● Independent Study ● Competitions ● Games **Attitudes** ● ●	**In School** ● Academic Subjects ● Arts & Sports ● Technology **Outside of School** ● Collections ● Arts ● Design ● Business ● History ● Law ● Government ● Humour ● Religion ● Charity ● Science ● Nature ● Sports ● Technology ● Writing ● Reading ● Research *(Include specific genres, topics, etc)*

A Closer Look at Each Category…..

Cognitive Functioning Information: Objective measures would include intelligence and achievement test scores. Examples include Woodcock-Johnson, WISC-IV, CCAT, OLSAT etc. Be sure to note exact percentile; if you do not have the scores for some reason, you should request this information. Objective measures of creative and critical thinking would also fall into this category. This might include Renzulli Scales or other tools used for assessment purposes such as rubrics utilized by teachers. Also of value would be work or performance samples in talent areas such as writing, art, or music (i.e. Conservatory exam reports.)

Subjective assessments of abilities would include observation or behavioural checklists. This might also include narratives written by someone who has assessed your child's achievement in an extra curricular activity. (You could request a summary from your child's instructor/teacher if it is not routinely given.) Also record any noteworthy report card comments.

Learning Strengths Information: Parent and teacher input in this column will lead towards the focus of the individual education plan (IEP).

Personality Characteristics and Interests/Attitudes Information: Parent and teacher assessments of personal characteristics and behaviours that are relevant to learning should be noted in columns three and four. In Dr. Roger's book, the "Parent Inventory for Finding Potential" on pages 444 – 449 can be used to catalogue intellectual, academic, creative, social, and artistic strengths. "Rogers' Interest Inventory" on pages 473 – 480 will also be helpful.

Learning Preferences Information: Self-reported learning preferences and learning styles inventories should be noted in the third column. Again, there is a useful tool that corresponds with this column in "Re-Forming Gifted Education"; the "How Do You Like to Learn" checklist on pages 454 – 472 can help if your child has difficulty pinpointing learning preferences.

Now That You Have Compiled all of your Data, What Should You Ask For….

There are four different elements that you should think about asking for. They are as follows, in varying priority, depending upon the data that you have now collected and recorded.

Number One: Like-Ability Opportunities for Learning and Socializing

Dr. Rogers shared the research results that her work has compiled for various grouping options.

- Groupings inside the school – The chart below indicates the learning outcomes that gifted research has found for the major grouping options.

- Groupings outside the school program – Find programs that match your child's interests and abilities with special interest clubs, competitive teams, talent clubs, talent performances, exhibitions, and extracurricular field trips. (It would be important to note these in the record you have compiled).

Some Grouping Strategies and Their Research Based Effectiveness

Full-time Ability Grouping (i.e. A congregated gifted program which allows the student to feel progression. It speaks to new learning, depth, and breadth of learning and also addresses pace and complexity of learning.)	The combined effect size of the studies indicated that elementary students would gain **nearly 6 months extra learning for every year** this strategy was used.
Regrouping for Specific Instruction (Delivers appropriately differentiated curriculum to a group of students at a specific ability or achievement level; might include honours groupings. This would be a ***modified*** program on an IEP.)	This particular study was the only one that looked at whether differentiation was actually occurring. The effect sizes ranged from **an additional 4 months to an additional 9 months of learning for every year** in the subject areas where this strategy was applied.
Cluster Grouping of Gifted/Talented Students (Identify and place the top 5-8 high ability students in the same grade level in one class with a teacher who likes them, is trained to work with them, and devotes proportional class time to differentiating the curriculum for them. This would be a ***modified*** program on an IEP.)	The outcome of these combined studies indicated **an additional 6 months of learning when students were groups by ability** and an additional 5 months when they were grouped by performance.
Pull-Out Grouping (Commonly known as "Enrichment" groups. The learning that happens in these groups must be focused and articulated).	Research indicated that when there is an academic focus, **nearly 6 months of additional learning can be achieved;** when the focus is on critical thinking skills, an additional 5 months of learning can be measured.
Within Class Ability Grouping (The programming must be articulated and differentiated).	This grouping strategy produced **an additional 4 months achievement per year** when studied.

Cross-Graded Classes (In order for this to be effective, the "basements and ceilings" must be taken off …that is to say that students must be allowed to begin where they are able to function, known as the zone of proximal development, and should be allowed to progress as far and as quickly as they are capable.)	The research indicates that this grouping method would result in **over 5 months additional learning per year** for gifted learners.
Mixed Ability Cooperative Groups (Also known as the regular classroom setting)	The combined results of all studies of gifted students in the regular classroom reveal that, despite being gifted learners, they do not make any additional progress in this setting and may even regress. **The effect size was zero.**
Like Ability Cooperative Groupings (Organize groups of learners in 3-4 member teams of like ability and adjusting the group task accordingly for a brief time each week)	**Over 3 months of additional learning per year** can be achieved with this method of grouping according to the research studies.

Number Two: Compacting the Regular Curriculum

Compacting means streamlining the regular curriculum to allow more time for enrichment, accelerated content, and/or independent study. This usually involves some form of pre-assessment of what the student has already mastered. There are many different versions of this such as grade telescoping, credit for prior learning and various forms of subject and grade-based acceleration (more commonly known as "skipping"). All of these programming strategies require careful design of appropriately challenging "replacement" activities and learning experiences that are implemented, monitored and assessed suitably.

Individualizing Strategies and Their Research Based Effectiveness

Non-Graded Classroom (Placing learners in a classroom without regard to age or grade and allowing them to work through the materials at a pace and level appropriate to their individual ability and motivational levels.)	Research studies have shown **over 4.5 months of additional learning outcomes per year** for students in this setting.
Multi-Grade Classrooms (Combining 2 or 3 grade levels onto one classroom and placing the brightest children as the youngest children in the class.)	The effect size of combined studies of this strategy indicated an **additional 2 months of achievement per year.**
One-To-One Mentoring (Placing a gifted student with a personal instructor who will offer curriculum at the appropriate level and pace – this must be formalized with assessment and communication put in place.)	**Over 6 months of additional achievement** could be measured for ever year of mentoring. There was a substantial positive effect for social/emotional development too.
Compacting	**In math and science. nearly 10 months of additional learning gain** for gifted students was measured. In Language Arts, Reading, and Social Studies, 3 months additional learning was achieved.
Credit for Prior Learning (allowing students to demonstrate mastery of previously learned material through pre-assessment; also called "testing out".)	This strategy resulted in **over 6 months of additional learning per year.**
On-Line, Distance Learning	**Over 3 months of additional learning per year** was indicated.

Accelerative Strategies and Their Research Based Effectiveness

Grade Skipping (Promoting a student such that one or more full grade levels are bypassed.)	At the elementary level, nearly **half a year of additional learning progress** can be made per year. This is in addition to the full year gain made by the grade skip directly.
Early Entrance to School (Allowing selected gifted children showing readiness to perform schoolwork to enter kindergarten or first grade 1-2 years earlier than usual.)	**Same as above.**
Subject Acceleration (Allowing students to move more quickly through the progression of skills and content in one subject where proficiency has been noted.)	The effect size of the research studies indicates **nearly 7 months of learning were gained** using this strategy.
Grade Telescoping (shortening the time for progressing through a grade level while still covering all the curriculum)	**Nearly 5 months of additional learning per year** can be gained.
Concurrent Enrollment (Allowing students to attend classes in more than one educational level at the same time – ie. Intermediate/Secondary, Secondary/University.)	**Over 2 months of additional learning achievement per year** were indicated in the research.
Advanced Placement Courses (Courses with advanced or accelerated content at the secondary school level, allowing student to be given credit for completion of post-secondary level coursework.)	**Over 3 months additional learning progress per year** can be achieved by taking AP courses according to the research studies.
Early Admission to College	Gifted students gained **an additional 3 months of learning progress** when this option was studied.
Credit by Examination (Provision of testing programs where the student, after successful completion of a test, will be offered course credits.)	**7 months of additional learning progress** per year were measured for students when this strategy was employed.

Number Three: Providing Opportunities for Individual Learning

Of all strategies, gifted children typically identify individual learning as their preference. This builds on their predilection for self-paced learning, independent study, guided discovery, and higher order thinking (i.e. processing that requires analysis, synthesis, evaluation, or other critical thinking skills). It is important for parents and educators to remember that the appropriate scaffolding is required to support a student through the individual learning process. Individual, or independent, does not mean that the student should work in isolation of any direction; the goal is to build the skills required for increasingly independent work in the future. There are a number of very good models that can be utilized for these purposes (Don Treffinger's Model, Renzulli's model, as well as George Bett's Autonomous Learner's Model – ALM).

Number Four: Providing Appropriate Learning Experiences in School

This area is likely to require the most patience, sensitivity, diplomacy, and evidential support. This will require consistent advocacy in a manner that will allow you to engage in a collaborative partnership with educators. These are considerations, based upon the information you have gathered about your child, that you need to promote as appropriate planning for your child.

Math and science must be 2-3 times faster than for regular classes, with drill and revision reduced considerably.

Science, reading, social studies, and the humanities must be conceptual and an in-depth study of a concept in its entirety. This is based upon research by Robert Sternbruck at Yale University that has established that gifted learners are actually decontextualists. This means that gifted learners require a whole concept forthwith and then they can break it down into its parts. It has been proven that they actually store the concepts to memory as whole concepts, as opposed to elements of a concept. In essence, this means that the gifted learner is looking for the "big ideas". When the same concepts are broken down, as our current curriculum does, into strands and steps, the gifted learner senses that something is incomplete and often struggles to learn the information and /or has difficulty retaining it.

Acquisition of new content must be a focus, not just processing and thinking. There must be direct, daily challenge in all areas of talent.

Content must be modified using abstraction, complexity, variety, study of people, and methods of inquiry. (This is content differentiation.)

Processes should be modified so that the child sees the value of some group products and learning, but also learns the skills of effective independent, self-directed learning. (This is process differentiation.)

Products should be varied … not just another oral or written report, but something unique or different. (This is product differentiation.)

All of this data would be the basis for an IEP. According to Dr. Rogers, for high potential learners approximately 65% of an IEP should focus on advancing the student in their area of talent; approximately 25% should focus on affective elements such as social/emotional development; and 10% on addressing areas of weakness.

Focus – Differentiated Instruction

Here in Ontario, *Education for All*, an expert panel report commissioned by the Ministry of Education, promotes differentiated instruction for all learners. Dr. Rogers conveyed that research indicates differentiation is a very effective strategy for gifted learners too, but a few things should be considered when putting this into action.

Differentiated curriculum must be articulated clearly and must have the appropriate supports in place for the educators who are expected to employ this strategy. This requires professional development, monitoring, additional resources, and assistance in adapting existing resources. One only needs to look at the number of differentiated curriculums available; there are currently at least 28 varieties to choose from. Also consider that most researchers have differing definitions of what differentiation is. Also note that current research indicates that when educators are left alone, they spend only 2% of their classroom time differentiating their instruction. Clearly there are still considerable variations in delivery and understanding of differentiation.

When differentiation is employed in a skillful manner, the results are significant. Students experience more positive academic self-concept. In correlation to appropriately increased challenge, gifted students stress levels are in fact reduced. Gifted learners have reported that the source of high stress levels is often repetitive rote learning and boredom; it would stand to reason then that differentiation would alleviate some of this.

Beyond The School

Parents need not rely solely on schools to ensure that the development of their children's abilities and character are optimized. Once the school has implemented all of the strategies possible, parents can still positively influence your child's learning and guide them in the direction that is most likely to foster their maximum potential.

- Know their interests and strengths and seek out talent development opportunities that will provide avenues for exploring and developing them.
- Encourage and support a sense of identity, uniqueness, and individual progress.
- Enhance memory development
- Provide experiences that allow your child to understand the world around them. Practical experiences of how things happen or work are an excellent starting point.
- Provide them with mixed ability and mixed age socialization opportunities.
- Also ensure occasions for like ability socialization and learning.
- Offer opportunities for communication skill development.
- Build some experiences around visual, spatial, dexterity development. (i.e. Orienteering, map reading, etc).
- Foster interest and love of the "classics" in both literature and the humanities…this provides opportunities for learning the "big ideas" in history, math, science, etc.

ABC Conference Speaker and Panelist Resource Recommendations

Books & Publishers

Great Potential Press

Free Spirit Press

Corwin Press

Flow by Mihalyi Cszent

Guiding the Social and Emotional Development of Gifted Youth: A Practical Guide for Educators and Counsellors By James Delisle (any of his books are excellent)

When Gifted Kids Don't Have All the Answers by James Delisle

The Social and Emotional Development of Gifted Children: What do we Know? By Maureen Neihart

The Well Trained Mind by Jessie Wise and Susan Wise Bauer

Teaching Gifted Kids in the Regular Classroom Susan Winebrenner (very practical book for teachers)

Being Smart About Gifted Children by Joanne Foster

Mindset Carol Dweck

Essential Readings in Gifted Education Series Corwin Press

Journals

Roeper Review

Gifted Child Today

Gifted Child Quarterly

Teaching for High Potential

Parenting for High Potential

Models/Curriculums

Understanding By Design – Grant Wiggins and Jay McTighe

Renzulli Learning (and other associated resources and info) – University of Conneticut NEG School

Francoys Gagner – *Gifts and Talents Model*

Carol Ann Tomlinson – *ASCD Association: Differentiation materials and training*

Don Treffinger – *Self-Directed Learning*

George Betts – *ALM Autonomous Learners Model*

Research

SMPY – *Study for Mathematically Precocious Youth*

Kenneth Brian Start (Melbourne) – *Research on Learning Rates and IQ*

Programs and Miscellaneous

Gifted and Talented Education – P.D. Package for Teachers
http://www.dest.gov.au/NR/rdonlyres/00A11834-8013-4C81-898B-FE8BFB0641B7/5473/Module6_EC.pdf

Inter-Board Network for Gifted Educators – Resources and info for educators

Omnibus – An enrichment program for primary students – supported by volunteers

Destination ImagiNation – an extracurricular enrichment program.

The Centre for Gifted Education - College of William and Mary

Assessment Tool – (NWEA) Northwest Evaluation Association - more individualized assessment tools

Websites

www.nagc.org – The National Association for Gifted Children

www.sengifted.org – (SENG) Supporting the Emotional Needs of the Gifted

www.beingsmart.ca - Being Smart About Gifted Children

www.abcontario.ca – Association for Bright Children (Ontario)

It should be noted that you will find much of this information in greater depth, as well as supporting tools, in Dr. Roger's book *Re-Forming Gifted Education: How Parents and Teachers Can Match the Program to the Child*.