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Department of Education & Training NSW document

“What is honoured in a country will be cultivated there” Plato
1 Gifted & Talented Education – Board of Studies & DET Policies

From NSW Dept. of School Education “Implementation of Strategies for the Education of Gifted and Talented Students,” 1991

1.1 Policy Statement 1:
School communities have a responsibility to identify their gifted and talented students

Policy Statement 2:
School communities have a responsibility to provide a range of opportunities for their gifted and talented students

Policy Statement 3:
Teachers have a responsibility to identify the gifted and talented students in their classrooms

Policy Statement 4:
Teachers have a responsibility to select a variety of teaching strategies for inclusion in the programs for the range of gifted and talented

1.2 DET Definition:
- “Gifted students are those with the potential to exhibit superior performance across a range of areas of endeavour.
- Talented students are those with the potential to exhibit superior performance in one area of endeavour.”

Definitions of ‘Giftedness’ are broad in the academic community, however, most share the following characteristics:
1. gifted children have the potential for unusually high performance in relation to one’s age-peers
2. includes only 15 – 20% of an age group
3. can occur in one or more areas
4. ‘the cream’ does not automatically ‘rise to the top’. The child’s personality and environment can help or hinder the translation of potential into performance.

Sources:
Eddie Braggett, Differentiated Programs for Primary Schools; Hawker Brownlow Education, 1997

2:1 Shared Understandings

I. At Wentworth Falls Public School we share a common understanding for why we need to cater appropriately for children with special needs.

II. We also believe we have an obligation, both morally and professionally to provide the most academically appropriate programs for ALL students.

III. All children are born with an array of innate abilities, many of which are gradually developed over time.

1. Gifted
Some students have high or outstanding competence in one or more areas with seemingly little outside assistance or influence.
These students we believe come under the umbrella of ‘Gifted’

2. Developed Performance – Talent
This is outstanding performance displayed by some students as a result of their own ability and the assistance they receive from others.

As distinct from giftedness – ‘talent’ results from one’s own ability PLUS assistance, support and systematic development over time.

It includes input from
- home
- school
- appropriate teaching and learning experiences
- special tuition if it is required

3. Talent Developed Over Time:
A significant number of students have high potential but these may not show up during the primary school stage of their development.

Over time their ability, learning, motivation and specialised interests may gradually combine and eventually result in highly talented performance … provided the environment encourages them to do so.

Supportive, effective & relevant teaching and learning experiences are essential for students to realise their potential.

“The broader we take our definition, the more we have to acknowledge that there are levels or degrees of giftedness. Our colleagues working in other areas of special education – teachers of hearing impaired, intellectually disabled or autistic children, for example – recognise that there are different levels of these conditions, and that the intervention that is designed for a particular child must respond not only to the presence of the condition, but to the degree to which it affects the child.

Similarly we have to acknowledge that gifted children are not a homogenous group. There are different levels, as well as different kinds, of giftedness. Highly and exceptionally gifted students need a curriculum that is even more challenging and intellectually rigorous than their moderately gifted classmates.”

Studies show that children identified as Gifted or Talented, who continued within the Education system mainstream .... 5 – 10% will move towards maximising their potential, 20% will adjust to the prevailing norm, another 20% will become poor achievers (often with learning difficulties) along with the other 50% who just ‘fade away’.


Before suitable curriculum modifications can be made to suit the learning needs of individual students, identification is necessary. Utilising a combination of sources and methods, will enable identification to be more effective and accurate.

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Adapted from: Taylor, S., Gifted & Talented Children A Planning Guide; User Friendly Resources Ltd. 2001
2.3 School Strategies, Procedures & Practices

Current provisions and strategies for addressing the learning needs of our gifted and talented student at Wentworth Falls PS include:

- Learning Support Team – G&T issues (and other learning support need cases) are raised, discussed & addressed. The team consists of school executive, school counsellor, Learning Support teacher, G&T coordinator, and classroom teachers with cases to discuss.

- Staff Inservicing

- Staff consultations with G&T coordinator – which may include assistance with behaviour issues, program modifications, or designing specific programs for individual students

- OC class – subject to Selective Schools Directorate. Year 4 student from upper Blue Mountains Schools who have successfully sat OC tests in August each year & met the intellectual and academic requirements set by the S.S.D.. 15 Year 5 students and 15 Year 6 students make up the class each year.

- Subject acceleration (students move into a higher grade for English or Maths daily)

- Full acceleration – this is not taken on lightly and requires lot of background work

- Lots of enrichment activities including Chess club, peer support – training and implementation, maths fun days, maths mentoring with District consultant via e-mail, choirs, whole school performances and shows, dance groups, science fair, science mentors, Streamwatch, international pen friends, international fundraising (leadership and management skills), cultural mentoring, e-learning (specially designed Internet work), community art shows and displays.

  NOTE: - these activities are open to ALL students allowing for those who may not have been identified to be involved and pursue their interests!

- Depending on funding from Learning Support we have in some years been able to run G&T withdrawal groups. This time was used for identified students to meet with G&T coordinator – depending on specific interests of students, a program was designed specifically for each student. Negotiated with class teachers, students would go on with their G&T work when class work/obligations were completed. During meetings with coordinator work would be discussed, marked and goals set for the following week (goal setting an extremely important aspect of this process).

- Ideally we agree with current research which supports the provision of meaningful and appropriate classroom programs, supporting student in their own mainstream class.
3 Classroom Strategies

The following are popular strategies for teaching gifted students both within specialist classes and mainstream classes.
1. Curriculum Differentiation
2. Curriculum Compacting
3. Accelerate or Flexible Progression
4. Independent Learning Strategies
5. Ability Grouping
6. Mentoring

3.1. Curriculum Differentiation

An overview of the research into the curriculum differentiation educational strategy

CURRICULUM DIFFERENTIATION is a broad term referring to the need to tailor teaching environments and practices to create appropriately different learning experiences for different students. Keirouz (1993) suggests typical procedures in the case of gifted and talented students include:

- deleting already mastered material from existing curriculum,
- adding new content, process, or product expectations to existing curriculum,
- extending existing curriculum to provide enrichment activities,
- providing course work for able students at an earlier age than usual, and
- writing new units or courses that meet the needs of gifted students.

June Maker's model of differentiated curriculum (Maker 1982a, 1982b, 1986) suggests that curriculum needs to be differentiated in terms of:

I. **Learning environment:** The aim is to create a learning environment which encourages students to engage their abilities to the greatest extent possible, including taking risks and building knowledge and skills in what they perceive as a safe, flexible environment. It should be:

- **student-centred** - focusing on the student's interests, input and ideas rather than those of the teacher,
- **encouraging independence** - tolerating and encouraging student initiative,
- **open** - permitting new people, materials, ideas and things to enter and non-academic and interdisciplinary connections to be made,
- **accepting** - encouraging acceptance of others' ideas and opinions before evaluating them,
- **complex** - including a rich variety of resources, media, ideas, methods and tasks, and
- **highly mobile** - encouraging movement in and out of groups, desk settings, classrooms, and schools.
II. **Content modification:** The aim is to remove the ceiling on what is learned, and use the student's abilities to build a richer, more diverse and efficiently organised knowledge base. This building can be facilitated by encouraging:

- **abstractness** - with content shifting from facts, definitions and descriptions to concepts, relationships to key concepts, and generalisations,
- **complexity** - with content shifting to inter-relationships rather than considering factors separately,
- **variety** - with content expanding beyond material presented in the normal program,
- **study of people** - including the study of individuals or peoples, and how they have reacted to various opportunities and problems, and
- **study of methods of inquiry** - including procedures used by experts working in their fields.

III. **Process modification:** The aim is to promote creativity and higher level cognitive skills, and to encourage productive use and management of the knowledge the students have mastered. This can be facilitated by encouraging:

- **higher levels of thinking** - involving cognitive challenge using Bloom's Taxonomy of Cognitive Processes (1984 - see Appendix A for brief details), logical problems, critical thinking and problem solving,
- **creative thinking** - involving imagination, intuitive approaches and brainstorming techniques,
- **open-endedness** - encouraging risk-taking and the response that is right for the student by stressing there is no one right answer,
- **group interaction** - with highly able and motivated students sparking each other in the task, with this sometimes being on a competitive and sometimes on a cooperative basis (depending on the task and its objectives),
- **variable pacing** - allowing students to move through lower order thinking more rapidly but allowing more time for students to respond fully on higher order thinking tasks,
- **variety of learning processes** - accommodating different students' learning styles,
- **debriefing** - encouraging students to be aware of and able to articulate their reasoning or conclusion to a problem or question, and
- **freedom of choice** - involving students in evaluation of choices of topics, methods, products and environments.

IV. **Product modification:** The aim is to facilitate opportunities for talented students to produce a product that reflects their potential. This can be encouraged by incorporating:

- **real problems** - real and relevant to the student and the activity,
- **real audiences** - utilising an "audience" that is appropriate for the product, which could include another student or group of students, a teacher (not necessarily the class teacher), an assembly, a mentor, a community or specific interest group,
- real deadlines - encouraging time management skills and realistic planning,
- transformations - involving original manipulation of information rather than regurgitation, and
- appropriate evaluation - with the product and the process of its development being both self-evaluated and evaluated by the product's audience using previously established "real world" criteria that are appropriate for such products.

A number of management strategies that are often useful in implementing curriculum differentiation strategies include:

- the use of contracts - allowing individualised and student negotiated programs and promoting the student's time-management skills and autonomy,
- conferencing - allowing dedicated student negotiation and review, and
- grouping strategies - facilitating children to work with "like minds" and encouraging group interaction (see separate notes on ability grouping).

References
© David Farmer 27 January 1996 - This piece was adapted from text I wrote for an educational video/booklet package Meeting the Needs of Gifted Students in the Regular Classroom SOURCE: http://www.austega.com/gifted/provisions/currdifferent.htm

3.2 Curriculum Compacting

An overview of the research into curriculum compacting as a educational strategy for schools

CURRICULUM COMPACTING "is the process of identifying learning objectives, pretesting students for prior mastery of these objectives, and eliminating needless teaching or practice if mastery can be documented" (Reis et al. 1992, p.10).

Curriculum compacting is increasingly being used in classrooms as part of teaching that is more precisely focused on student needs. The aim is to avoid wasting time and risking loss of motivation in teaching material that students have already mastered. The technique simultaneously generates the time needed for extension activities, independent projects, mentoring and similar educational strategies that are more appropriate for the students.

Research from the US suggests [1] that the difficulty level of textbooks has declined (Farr & Tulley 1985) with "new work" in mathematics texts only accounting for about half of the texts' content (Flanders 1987), [2] that most average late primary students can pass pretests on basal comprehension tests before the material is presented (Taylor & Frye 1988), [3] that eliminating up to 50% of the grade level curriculum for gifted students made no difference in achievement test results (Reis et al. 1992), and [4] that with minimal training teachers can effectively identify and eliminate already mastered material (Reis et al. 1992).
Curriculum compacting involves the following steps (Gibson 1993, Reis et al. 1992, Winebrenner 1992):

- identifying the relevant learning objectives
- finding or developing some means of assessing students' achievement of these objectives prior to instruction - important for teaching focus and accountability, pretests can often be found in textbooks
- determining if all or only selected students should be pretested for possible curriculum compacting - any selection could be based on a wide range of factors covering general indications of both giftedness and subject-specific talent, it could also be voluntary with the purpose made clear to students
- pretesting - the assessment should be detailed enough to indicate particular sub-areas of mastery and non-mastery, the concept of mastery relates to the defined learning objectives, and may be at a similar level to what would be considered "mastery" after instruction
- eliminating practice and instruction in areas where students have achieved the learning objectives - generating time for these students to participate in or pursue enrichment or acceleration options
- streamlining instruction of those sub-areas where students have indicated achievement of some of the learning objectives
- offering acceleration and enrichment options - this challenging step involves teacher preparation and planning and can include: students working their way through the curriculum with teacher oversight, individual or small group research or hands-on projects, mentoring, etc
- keeping records - for both professional accountability and teacher ease of management, records can include both specially designed forms and student products and self-evaluation reports.

3.3 Acceleration or Flexible Progression

An overview of the research on acceleration/flexible progression

Acceleration (Braggett 1992a, 1993b) is both

- a student reality when a student has already progressed through the curriculum in one or more areas beyond his or her age level, and
- a school or teacher response in recognising and facilitating this reality with appropriate class placement or program tailoring.
Research shows that accelerated gifted students out-perform non-accelerated gifted control students and perform as well as equally gifted older students in the higher grades (Kulik & Kulik 1984a).

Flexible progression allows students to work at their own level rather than at some predetermined level deemed appropriate for students of that age. This can occur within the students’ age classes with the use of curriculum differentiation and other flexible teaching strategies.

However, the needs of many gifted students may be better met with the students being placed in a different class setting for one, several or all curriculum areas. Factors to be considered in this decision are:

- where the best fit between educational program and student's needs can be found;
- where the most facilitating learning environment (including psychological aspects as well as resources) for the student can be found;
- where the most likely meeting of "like minds" can be encouraged; and
- where the most efficient use of scarce teacher resources can be made.

i. Responding to Gaps

The teacher considering accelerated placement needs to assess the student's current skill levels in all areas to eliminate as much uncertainty as possible about the placement decision.

A student does not necessarily need to have reached all the curriculum entry milestones of a higher level for that level to be the "best fit" for that student's needs. Consequently as with most students there may be gaps in the student's skills (and some transitional remedial work may be required).

ii. Socio-Emotional Aspects

It is a common belief that acceleration can place socio-emotional pressure on a student and that accelerated placement should not be considered unless the student shows him or herself to be socially and emotionally robust. In contrast, much of a gifted child's apparent socio-emotional immaturity is more likely to be due to his inappropriate placement away from others of a like mind.

Research suggests a student's social and emotional development is correlated more highly with his or her mental age than with his or her chronological age (Tannenbaum 1983, Janos & Robinson 1985). Research also suggests that children tend to make friendships with those of a similar mental age (O'Shea 1960).

Social and emotional behaviour would also be dependent on the manner in which an accelerated placement is handled, and on the general attitude within the school environment of accepting or not accepting those who are different in some way. Accelerated placements are more likely in schools with open and accepting atmospheres and where accelerants are not made to feel conspicuous.
Some gifted students, particularly exceptionally gifted students, may also perceive others and the world so differently that they will never fit the normal models of socio-emotional behaviour (Gross 1992, 1993). It is inappropriate to deny these students more appropriate educational provision. The question should be whether the socio-emotional effects of accelerated placement are likely to be negative, neutral or positive, and whether any negative elements can be reduced.

iii. Trial Periods and Transitions

The transition to an accelerated placement is made easier if:

- the school has encouraged intra-class mobility, contact and groupings for various activities and projects;
- the teacher has encouraged flexible progression within the class thus facilitating the students to be ready for the curriculum of the new class;
- the student's ability places him or her in the upper ability levels of the new class;
- both the receiving and transmitting teachers are supportive of the placement; and
- the student and his or her family have been involved in the decision-making and are supportive of the placement.

Transition processes would vary for each school and student, but should be sensitively handled - avoiding such unnecessary traumas as the student arriving unprepared before the new class and avoiding any unnecessary labelling or conspicuous attention.

A "trial period" may also reduce the stress of the accelerated placement, provided that any subsequent decision not to proceed with the placement is not seen as a "failure" by the student or as irrevocable - an accelerated placement might well be appropriate with different.

iv. Group Acceleration

Group acceleration involves avoiding or minimising timetabling difficulties by grouping the differing needs of a range of students into one class-size group. For example for several years the opportunity has existed within maths for promising groups of mathematics students could continue to be timetabled in that year's mathematics slot, while they complete an extension maths curriculum.

This process is a practical compromise solution that assumes there is a class-size group of students with similar mathematical talents and needs. Once started it is important that such a group acceleration takes the selected students all the way through the subject area, to avoid students who have successfully worked on an accelerated program being forced to repeat work.

Ideally the subject area and the group acceleration strategy as a whole needs to be assessed afresh each year against the characteristics of the student body in order to select the best use of limited resources to meet the needs of the new students at the time.
3.4 Independent Learning Strategies

An overview of the way independent learning strategies can be introduced into a school's educational strategies

INDEPENDENT LEARNING STRATEGIES facilitate parts of a differentiated curriculum. Emphasis is placed on student negotiation and modification of tasks, and on students pursuing these tasks with greater independence.

This can be achieved by

- preparing in advance options for the students to select as part of a unit's work (with options set at variable levels, involving different skills and appealing to different learning styles),
- encouraging students to choose the option they felt was most relevant - with this involving teacher input to facilitate student awareness of the match between the options and the student's talents and needs,
- encouraging students to suggest and pursue variations to the suggested options if they can present them as viable options to the teacher,
- encouraging students to work in groups if appropriate to the task (and, where this is done, encouraging cooperative group skills),
- encouraging students to seek out appropriate resources independently, and
- encouraging students to seek out and utilise working environments conducive to the task (for example, the "recital performance" based task involved moving outside and the analytic discussion based option involved moving to another room or an "independent learning centre" - see below).

Independent learning strategies can be utilised with appropriate students in primary or elementary schools as well as those in high schools.

Fostering students' independence in shaping their learning empowers them and increases the motivation and enthusiasm they bring to the process and to individual tasks. They become engaged in and responsible for their own education and this flows through to the way they view life as a whole.

**Independent Learning Centres**

An "independent learning centre" is a flexible space with appropriate resources where students can pursue independent projects or learning. Key elements of an "independent learning centre" (ILC) are:

- a space for one or more groups or individuals to work in relative harmony (at higher discussion/noise levels than a library),
- suitable furnishings and resources (tables, computers, sound equipment, lock-away spaces, etc) to encourage flexible and relatively spontaneous use,
- a coordinator to handle ILC "bookings" and overall management,
- a teacher roster (perhaps at half teacher loading, supplemented by appropriate parent volunteers) to allow for necessary supervision and, where appropriate, assistance - the coordinator may try to link students
using the ILC with ILC rostered teachers and parents with appropriate
skills (particularly with interdisciplinary projects), and
- an understanding amongst the teaching staff that the ILC is there as a
resource area for individuals or groups to flow into - this may develop over
time.

3.5 Ability Grouping Strategies

An overview of the research on the ability grouping educational strategy

GROUPING STRATEGIES based on ability are used in various forms in schools and
classrooms world-wide, and are certain to arouse discussion, though this is less so in
sports and musical areas. The tragic extremes of the debate are probably epitomized on
the one hand by students "labelled" at enrolment to the point that their educational
paths are fully determined, and on the other by students clearly in need of a particular
educational program but denied it on the basis that all students, no matter how different
they and their needs may be, should be provided with the "same education".

Beneath this often heated debate, the research provides strong support for ability
grouping. Grouping on the basis of ability "with appropriate differentiated instruction" is
clearly beneficial, not only to high ability students but also to average and low ability
students (Allan 1991).

Grouping strategies can be usefully divided into categories.

I. Within-class ability grouping

Such groupings within mixed-ability classrooms clearly benefit students (Slavin 1986,
Karweit 1984). Kulik and Kulik (1989) consider both those within-class ability grouping
strategies designed for all students and those targeting only academically talented
students. They find the former benefits all students to a small extent whilst the latter
shows particularly strong advantage for academically talented students.

The problems of self-fulfilling "labelling" of students in terms of ability level can be
minimised by:

- avoiding conspicuous labelling altogether, allowing groups just to be
groups with non-judgemental identifiers if identifiers are required,
- adopting a student-centred approach to learning where expectations are
student-initiated rather than teacher-imposed,
- not setting group compositions in concrete, but allowing different students
to enter and exit as appropriate, including a degree of self-selection and
other broad identification procedures, and
- facilitating different groups for different curriculum areas or units.

There are a multitude of different ways of devising and using ability groups depending
on the teacher, class and subject area. They can range from teacher-nominated to
those with large degrees of self-selection based on predetermined tasks with clearly
different levels of ability and motivation required.
II. "Streaming" classes

Kulik (1985) found that students permanently streamed in classes based on ability slightly outperformed students in non-streamed classes, with the effect strongest in high ability classes, weaker (but still positive) in middle level classes and making no difference in low ability classes. Slavin (1986) found no significant positive or negative effects for such permanent streaming.

Looking solely at gifted and talented programs Kulik (1989) found these students performed significantly better than comparable students in mixed-ability classes.

The research is more uniformly supportive of ability class grouping for specific subject areas. This selective streaming is often applied in mathematics and/or language arts. Slavin (1986) suggests this can be particularly effective:

- when it is done for only one or two subject areas –eg maths
- when it reduces the range of subject skill levels in each group,
- when the group composition is frequently reviewed, and
- when teachers vary the teaching pace accordingly.

Kulik (1989) found selective streaming advantageous even without these constraints.

Some criticism of ability grouping is based on the supposed negative impact on self-esteem for those students placed in low ability groups. This does not in fact appear to be the case (Allan 1991), with ability grouping having minor, generally positive effects. Indeed there appears to be positive effects on the self-esteem of slower learners with instruction received in homogeneously streamed groups. This is partly offset by slight negative effects for high ability learners in high ability groups. The negative effects of labelling seem to be overshadowed by the actual daily comparison students make with others in their classroom.

The negative effects of labelling can be reduced by minimizing any conspicuous nature of the labelling involved (for example using colours or names of famous people to name groups rather than "advanced", "normal" and "remedial"), and by retaining as much flexibility as possible in terms of group selection and revision. The "role model" argument in favour of heterogeneous groups appears flawed as children of low or average ability do not model themselves on fast learners even when they are in the same class (Schunk 1987).

The weight of argument in favour of ability grouping appears strong with questions now appropriately shifting to how such ability grouping can be most appropriately handled, and to whether it should be across all ability levels or targeted largely at the gifted and talented.
3.6 Mentoring

An overview of a way that mentoring can be introduced into a school's educational provisions

MENTORING ALLOWS the educational needs of talented students to be met even when these fall outside the school curriculum and outside the expertise of the students' teachers. This is achieved by linking the student with an experienced person from the appropriate field of endeavour. Relating to experts outside the school environment also requires the students to become more responsible for their own learning, with students establishing goals with their mentor, and generally learning by doing.

I. Selecting students for mentoring

Mentoring best suits students who have already shown some dedication and commitment to the area of interest, such as in already working independently on "real problems or projects" in the area. Self-motivation (at least in the subject area) and organisation are also key attributes if the student is to gain from the less structured mentor arrangement.

One school's selection process is as follows:

- a general invitation is made at assembly for expressions of interest;
- interviews are held with students coming forward, outlining the process and the self-motivation and organisation required;
- comments and confirmations are sought from the student's teachers and parents;
- endeavours are made to find a suitable mentor in the student's area of interest; and
- the first mentor/student meeting discusses and refines the student's goals, with both parties able to terminate the relationship should either wish.

II. Mentors - characteristics

Mentors are not tutors or substitute teachers but rather are professionals interacting with "junior colleagues". Mentors act as advisers, consultants, and role models, and sometimes as critics where this facilitates the student's achievement of their own goals and objectives. Mentors ideally should have:

- an enthusiasm for the subject area;
- considerable experience and overall perspective in the subject area;
- an interest in assisting young persons in developing their skills and awareness;
- some ready communications skills to foster interaction in an informal setting; and
- an awareness of any moral issues that pertain to the field of endeavour.
III. Finding Mentors

Although not normally paid, mentors can benefit from being involved in a mentoring relationship in terms of freshness and perspective. Mentors can be found from a wide range of sources, including:

- from a school's parent body;
- from other teaching staff;
- from older students (including from secondary or tertiary institutions);
- from local businesses and community arts bodies;
- via professional bodies and associations in the area of interest; and
- from ex-students of the school.

Some schools rely extensively on ex-students. This means that most of the mentors are well-known to members of the teaching staff. In some school districts there are centralised mentor schemes that schools can use (eg Mentor Links in the Sydney metropolitan regions).

IV. Risk management

Clearly there are risks involved in linking students with mentors, especially when mentors may not be personally known to members of the teaching staff and the meetings take place other than at school premises. On the other hand it would be a pity if these risks preclude appropriate learning experiences for students.

These risks can be managed by:

- seeking, where possible, mentors that are known to members of staff;
- advising students and parents of the nature of the mentor program including that it may take place away from school;
- asking parents to complete a release and indemnity document in regard to the mentor program;
- asking parents to attend the first meeting between student and mentor and then to agree to the program proceeding;
- providing mentors with simple guideline notes;
- asking both the student and mentor to complete evaluations at the conclusion of the arrangement; and
- allowing either the student or mentor to withdraw from the arrangement at any time.

Apart from common sense the essential principles are to ensure that all parties are fully informed and to ask that the parents or guardians make the decision to proceed and thereby take on the risk. From a parental viewpoint this is hardly unusual - parents frequently take risks in regard to activities as part of their children's broader education.
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<td>- creative thinking &amp; production</td>
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<td>- leadership</td>
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<td>- psychomotor ability</td>
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<td>- visual &amp; performing arts</td>
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<td>2</td>
<td><strong>Student Characteristic Survey</strong></td>
<td>Staff &amp; parents</td>
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<td>3</td>
<td><strong>Multiple Intelligences Identification checklist</strong></td>
<td>staff</td>
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<tr>
<td>4</td>
<td><strong>In-school Referral form for G&amp;T coordinator</strong></td>
<td>staff</td>
</tr>
<tr>
<td>5</td>
<td><strong>G&amp;T – Independent Educational Program (IEP)</strong></td>
<td>Follow up organisation to School Referral</td>
</tr>
<tr>
<td>6</td>
<td><strong>THEORIES</strong></td>
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<td></td>
<td>I. Engaging Kids</td>
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<td>II. Learning Styles</td>
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<td>III. Multiple Intelligences</td>
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<td>IV. Right Brain VS. Left Brain</td>
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<td>V. Control Theory</td>
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<td></td>
<td>VI. Observational Learning</td>
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<td>VII. Vygotsky &amp; Social Cognition</td>
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<td>7</td>
<td><strong>Assessment</strong></td>
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<td>I. Authentic Assessment</td>
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<td>II. Classroom Assessment</td>
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<td>III. Portfolio Assessment</td>
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<tr>
<td>8</td>
<td><strong>Emotional Intelligence</strong></td>
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<tr>
<td>9</td>
<td><strong>Glossary Of Gifted Education</strong></td>
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<td></td>
<td>* Jargon Buster *</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><strong>Australian Support Groups</strong></td>
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<tr>
<td>11</td>
<td><strong>Good Print Based Resources</strong></td>
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Appendix I

Characteristics Checklist for Gifted Children
http://www.austega.com/gifted/characteristics.htm#specific_academic_aptitude

Provides a characteristics checklist for teachers and parents looking for signs of giftedness in young children

OFTEN THE EARLIEST identification of gifted children takes place by simple observation of the child's behaviour by an educational professional, a parent or friend. Far from undermined by being subjective, identification by characteristic traits is generally accurate, and is less intrusive or conspicuous than other methods. It also readily allows types of giftedness to be detected, and is often valuably used with young children. Nonetheless subjective elements are certainly involved particularly in comparisons with other children of the same age.

The following lists were adapted from one compiled from various sources. Note it is not expected that any gifted child will show all the traits listed in any section.

Characteristic traits are listed by broad category of giftedness. These are:

- general intellectual ability
- specific academic aptitude
- creative thinking and production
- leadership
- psychomotor ability
- visual and performing arts

I. General intellectual ability

- is an avid reader
- has avid interest in science or literature
- provides very alert, rapid answers to questions
- has a wide range of interests
- is secure emotionally
- is venturesome, wanting to do new things
- tends to dominate peers or situations
- is an entrepreneur - readily makes money on various projects or activities
- needs little outside control - applies self discipline
- is resourceful - solving problems by ingenious methods
- is creative in new ideas, seeing associations, pursuing innovations
- displays a great curiosity about objects, situations or events
- has the capacity to look into things and be puzzled
- is involved with many exploratory type activities
- reveals originality in oral and written expression
- is perceptually open to his or her environment
- displays a willingness to accept complexity
• has the capacity to use knowledge and information other than to memorise
• shows superior judgement in evaluating things
• is a good guesser
• makes good grades in most subjects
• learns rapidly, easily and efficiently
• uses a lot of commonsense
• retains and uses information which has been heard or read
• uses a large number of words easily and accurately
• asks many questions of a provocative nature
• has a power of abstraction, conceptualisation and synthesis
• has an interest in cause-effect relations
• has a liking for structure, order and consistency
• has a power of concentration, an intense attention that excludes all else
• is persistent
• has a high energy level
• is independent
• is friendly and outgoing

II. Specific academic aptitude

• shows similar characteristics to general intellectual ability but concentrated around one or a few fields
• has a long attention span in areas of interest
• learns rapidly, easily and with less repetition in one or a few specific areas (probably not all subject areas)
• likes or loves one or a few areas of knowledge
• likes to study some subjects more than others
• spends time voluntarily beyond ordinary assignments on projects of interest to him or her
• is able to extend learning from these key areas to various situations somewhat unrelated in orientation
• is able to show broad perspective on one or more subject areas
• is able to judge own and others' relative abilities in key areas of interest
• seeks assistance of others beyond his or age peers in extending knowledge in areas of interest

III. Creative thinking and production

• is fluent in producing and elaborating on ideas
• makes unusual associations between remote ideas
• is flexible in thinking patterns
• senses when problems exist
• acts spontaneously, intuitively
• tolerates ambiguity and uncertainty
• senses inconsistencies and discontinuities
• readily guesses and makes hypotheses
• juggles or redefines elements of a problem or task
• can show intense concentration on a task
- retains own ideas in a discussion or collaboration
- provides multiple solutions or responses to problems
- is uninhibited in expression, sometimes radical
- is intellectually playful, interested in fantasy, imagination
- always trying to adapt or improve things
- has a keen sense of humour, seeing humour in situations others don't
- doesn't mind being different
- doesn't accept authoritarian pronouncements without own judgement
- asks provocative questions, challenges parents, teachers, written and other authorities
- is bored with memorisation and recitation
- displays energy, sometimes disruptively
- produces unexpected, sometimes "silly" responses
- is considered, and perhaps resented, by some peers as "crazy"
- can show unusual degrees of originality, concentration and persistent hard work on projects that capture their interest and imagination

IV. Leadership

- can stimulate and arouse others
- organises others
- recognises skills and abilities possessed by others
- interacts with others easily showing social skills
- recognises and can articulate the goals of a group
- can articulate ideas clearly
- can listen to others empathetically
- understands how people feel and how groups function
- can give directions clearly and effectively
- exercises authority reliably and responsibly
- can adopt non-leadership roles within a group
- can establish the mood of a group
- supports others in a group when appropriate
- can coordinate the work of several individuals
- is often asked for ideas and suggestions
- is looked to by others when something must be decided

V. Psychomotor ability

- is rhythmic
- is athletic
- likes to play physically
- has a suitable body build
- is coordinated, balanced and confident in physical activities
- is inventive in constructing or modifying games
- is energetic
- is able to understand the intellectual aspects of psychomotor activities
- demonstrates endurance, stamina and persistence in physical activities
- demonstrates prowess in physical activities common amongst age peers
VI. Visual and performing arts

Music

- has good sense of rhythm
- is well-coordinated
- discriminates musical and other sounds well
- understands musical relationships
- enjoys musical activities and demonstrates musical feeling
- shows tonal memory
- responds readily to rhythm, melody and harmony
- uses music to express feeling or experience
- makes up original tunes
- enjoys dance and dramatic activities with musical elements

Dramatics

- demonstrates interest and enjoyment in dramatic activities
- readily shifts into role of another character, animal or object
- uses voice to reflect changes in mood
- demonstrates understanding of conflict when acting out a dramatic event
- communicates feelings by means of facial expressions, gestures and bodily movements
- enjoys evoking emotional responses from listeners
- demonstrates ability to dramatise feelings and experiences
- brings a dramatic situation to a climax with a well-timed ending when telling a story

Art

- draws a variety of objects
- puts depth into drawing, showing planning and good proportion
- treats art seriously and enjoys it
- shows originality in modes of undertaking art
- is willing to try out new materials and experiences
- pursues art in spare time
- uses art to express feelings and experiences
- is interested in other people's art, both appreciating it and criticising it
- likes to model three dimensionally with clay, soap carving, plasticine etc
### STUDENT CHARACTERISTIC SURVEY

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Student Name: ________________________________</td>
<td>Usually</td>
<td>Sometimes</td>
</tr>
<tr>
<td>1</td>
<td>Unusually advanced, fluent, rich vocabulary (oral or written)</td>
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</tr>
<tr>
<td>2</td>
<td>Amazing store of information about a variety of topics</td>
<td></td>
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<tr>
<td>3</td>
<td>Quick mastery &amp; recall of information</td>
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<tr>
<td>4</td>
<td>Rapid insight into cause &amp; effect relationships; needs to know how &amp; why of things</td>
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<tr>
<td>5</td>
<td>Quickly understands underlying principles, similarities, differences &amp; is able to make valid generalisations across subject areas, events &amp;/or people</td>
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<tr>
<td>6</td>
<td>Is keen, intense &amp; sensitive observer</td>
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<tr>
<td>7</td>
<td>Eager reader; reads &amp; understand sophisticated difficult material</td>
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<td>8</td>
<td>Enjoys reasoning thing out; analysing knowledge; enjoys complex ideas</td>
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<tr>
<td>9</td>
<td>Becomes intensely involved in certain topics or problems; is absorbed &amp; persists until task is completed</td>
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<tr>
<td>10</td>
<td>Easily bored with routine tasks</td>
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<tr>
<td>11</td>
<td>Not easily satisfied with his or her speed or products; perfectionist; self critical</td>
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<tr>
<td>12</td>
<td>Requires little direction from teacher or parent to complete tasks</td>
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<tr>
<td>13</td>
<td>Is interested in many ‘adult’ issues &amp; problems</td>
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<tr>
<td>14</td>
<td>Often stubborn in beliefs</td>
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<tr>
<td>15</td>
<td>Loves to organise &amp; bring structure to people, things &amp; situations</td>
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<tr>
<td>16</td>
<td>Shows great concern for right &amp; wrong; justice &amp; fairness; can be extremely judgemental</td>
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<tr>
<td>17</td>
<td>Incredibly curious; constantly asking questions</td>
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<tr>
<td>18</td>
<td>Offers many ideas for solutions to problems; often unusual, clever, unique suggestions</td>
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<tr>
<td>19</td>
<td>Uninhibited in expressing opinion; spirited in disagreement</td>
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<td>20</td>
<td>Adventurous risk-taker; loves speculating</td>
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<tr>
<td>21</td>
<td>Loves intellectual play, manipulating ideas, fantasy or imagining. Enjoys imagining improved versions of objects &amp; systems</td>
<td></td>
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<tr>
<td>22</td>
<td>Keen sense of humour (sometimes appropriate, sometimes not)</td>
<td></td>
</tr>
</tbody>
</table>

Extra information:
### IDENTIFICATION FORM: CHILDREN WITH SPECIAL ABILITIES – MULTIPLE INTELLIGENCES

<table>
<thead>
<tr>
<th>MULTIPLE INTELLIGENCES</th>
<th>NOMINATED STUDENTS</th>
<th>TEACHER</th>
<th>OTHER SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body kinaesthetic</td>
<td></td>
<td></td>
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<tr>
<td>Physical movement &amp; knowledge of use of the body</td>
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<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
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<tr>
<td>Relationships &amp; communication; understanding others</td>
<td></td>
<td></td>
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<tr>
<td>Intrapersonal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Knowledge of own thinking and emotions</td>
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<td></td>
<td></td>
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<tr>
<td>Linguistic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of words &amp; language</td>
<td></td>
<td></td>
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<tr>
<td>Logical-Mathematical</td>
<td></td>
<td></td>
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<tr>
<td>Mathematic and scientific reasoning</td>
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<td></td>
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<tr>
<td>Musical</td>
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<tr>
<td>Sensitivity to rhythm, tonal patterns, performance &amp; composition</td>
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<tr>
<td>Naturalist</td>
<td></td>
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<tr>
<td>Curiosity about natural world; ability to classify flora &amp; fauna</td>
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<tr>
<td>Spatial</td>
<td></td>
<td></td>
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<tr>
<td>Comprehension of the visual world; creation of mental images</td>
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</table>
Gifted & Talented Referral Form

Date: __________________

Name: ______________________________                            D.O.B:__________________

Class: __________                                                   Teacher:______________________

Current Instructional Levels/ Stages for

English:~ Reading:____ Writing: ____ Spelling:_____ T&L: _____

Reason for referral:
________________________________________________________________________________
________________________________________________________________________________

Type of program you would prefer for this child: [tick]
__You wish this child to stay in class and require ideas (programming assistance) for appropriate extension activities to meet learning needs.
__A ‘pull out’ program where the child will work independently on a workbook during class time. You decide when and how long student spends on these activities through the week. Once a week student will meet with G&T teacher to review work and set activities for following week [Wednesday afternoons]
__No special program – I just want to discuss options and learning needs of this student
__ Other options:

Identification / Checklists completed – prefer more than one identification measure (e.g. Teacher General Checklist, Parent Nomination, counsellor recommendation - IQ test, standardised test results, etc) List below OR Indicate below which checklist/s you require:

____________________________________________________________

Please return to my pigeon hole ASAP.  

Michelle
G&T – Independent Educational Program (IEP)
Teacher Questionnaire for Planning Sessions

Dear

Following your referral, _____________________ has been accepted by the Learning Integration Team into the current G&T IEP sessions beginning Week 1 Term 2.

To assist me in planning appropriate work for this student could you please fill in & answer the following questions.

1. Would ___________ Wednesdays be convenient for this student to meet with me to discuss the work they have completed each week?  YES / NO (Prefer: ___________)

2. Are you prepared to allow this student to work independently in the Library for research purposes, internet access and ‘thinking space’ (if necessary) with Rosemary’s permission? The student would be expected to report back to you and show / tell you what they accomplished during their time away.  YES / NO

3. Please shade in the times that would be convenient for this student to work independently on the work / assignments I will set them – 2 hours a week would be optimum. The student will also have a copy of this timetable.

<table>
<thead>
<tr>
<th>Morn Sessions Times:</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
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4. How would you prefer my evaluations of this student’s progress –
   - written correspondence / brief report (= copy of my weekly evaluation report)
   - short weekly / fortnightly interview

5. Would you like some assistance with ideas for catering for the specific learning needs of this student within the regular classroom?  YES / NO

6. If ‘yes’ please identify specific areas of need for you and the student – I’m happy to talk this through with you if you prefer.

___________________________________________________________________________

___________________________________________________________________________

7. Any other questions, suggestions, anticipated problems etc?

___________________________________________________________________________

___________________________________________________________________________

Thank you for taking the time to complete this questionnaire. I am very much looking forward to working with you in helping meet the specific learning needs of this student.

Yours in learning
I. Engaging Kids

Kids are best engaged when they are actively involved in an activity. This means challenging kids with something they want to achieve. We do this by drawing on what leading educators, psychologists, and other experts have learned. Read on!

II. Learning Styles

Definition
This approach to learning emphasizes the fact that individuals perceive and process information in very different ways. The learning styles theory implies that how much individuals learn has more to do with whether the educational experience is geared toward their particular style of learning than whether or not they are "smart." In fact, educators should not ask, "Is this student smart?" but rather "How is this student smart?"

Discussion
The concept of learning styles is rooted in the classification of psychological types. The learning styles theory is based on research demonstrating that, as the result of heredity, upbringing, and current environmental demands, different individuals have a tendency to both perceive and process information differently. The different ways of doing so are generally classified as:

1. **Concrete** and **abstract perceivers**—Concrete perceivers absorb information through direct experience, by doing, acting, sensing, and feeling. Abstract perceivers, however, take in information through analysis, observation, and thinking.

2. **Active** and **reflective processors**—Active processors make sense of an experience by immediately using the new information. Reflective processors make sense of an experience by reflecting on and thinking about it.

Traditional schooling tends to favor abstract perceiving and reflective processing. Other kinds of learning aren't rewarded and reflected in curriculum, instruction, and assessment nearly as much.
How the Learning Styles Theory Impacts Education

Curriculum--Educators must place emphasis on intuition, feeling, sensing, and imagination, in addition to the traditional skills of analysis, reason, and sequential problem solving.

Instruction--Teachers should design their instruction methods to connect with all four learning styles, using various combinations of experience, reflection, conceptualization, and experimentation. Instructors can introduce a wide variety of experiential elements into the classroom, such as sound, music, visuals, movement, experience, and even talking.

Assessment--Teachers should employ a variety of assessment techniques, focusing on the development of "whole brain" capacity and each of the different learning styles.

Reading
Bernice McCarthy, *The 4-MAT System: Teaching to Learning Styles with Right/Left Mode Techniques.*

David Kolb, *Experiential Learning: Experience as the Source of Learning and Development.*

Carl Jung, *Psychological Types.*


III. Multiple Intelligences

Definition
This theory of human intelligence, developed by psychologist Howard Gardner, suggests there are at least seven ways that people have of perceiving and understanding the world. Gardner labels each of these ways a distinct "intelligence"--in other words, a set of skills allowing individuals to find and resolve genuine problems they face.

Discussion
Gardner defines an "intelligence" as a group of abilities that:

- Is somewhat autonomous from other human capacities
- Has a core set of information-processing operations
- Has a distinct history in the stages of development we each pass through
- Has plausible roots in evolutionary history
While Gardner suggests his list of intelligences may not be exhaustive, he identifies the following seven:

1. **Verbal-Linguistic**—The ability to use words and language
2. **Logical-Mathematical**—The capacity for inductive and deductive thinking and reasoning, as well as the use of numbers and the recognition of abstract patterns
3. **Visual-Spatial**—The ability to visualize objects and spatial dimensions, and create internal images and pictures
4. **Body-Kinaesthetic**—The wisdom of the body and the ability to control physical motion
5. **Musical-Rhythmic**—The ability to recognize tonal patterns and sounds, as well as a sensitivity to rhythms and beats
6. **Interpersonal**—The capacity for person-to-person communications and relationships
7. **Intrapersonal**—The spiritual, inner states of being, self-reflection, and awareness

**How Multiple Intelligences Impact Learning**

**Curriculum**—Traditional schooling heavily favors the verbal-linguistic and logical-mathematical intelligences. Gardner suggests a more balanced curriculum that incorporates the arts, self-awareness, communication, and physical education.

**Instruction**—Gardner advocates instructional methods that appeal to all the intelligences, including role playing, musical performance, cooperative learning, reflection, visualization, story telling, and so on.

**Assessment**—This theory calls for assessment methods that take into account the diversity of intelligences, as well as self-assessment tools that help students understand their intelligences.

**Reading**

Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences*.

---

**IV. Right Brain vs. Left Brain**

**Definition**

This theory of the structure and functions of the mind suggests that the two different sides of the brain control two different "modes" of thinking. It also suggests that each of us prefers one mode over the other.

**Discussion**

Experimentation has shown that the two different sides, or hemispheres, of the brain are responsible for different manners of thinking. The following table illustrates the differences between left-brain and right-brain thinking:
Most individuals have a distinct preference for one of these styles of thinking. Some, however, are more whole-brained and equally adept at both modes. In general, schools tend to favour left-brain modes of thinking, while downplaying the right-brain ones. Left-brain scholastic subjects focus on logical thinking, analysis, and accuracy. Right-brained subjects, on the other hand, focus on aesthetics, feeling, and creativity.

### How Right-Brain vs. Left-Brain Thinking Impacts Learning

**Curriculum**—In order to be more "whole-brained" in their orientation, schools need to give equal weight to the arts, creativity, and the skills of imagination and synthesis.

**Instruction**—To foster a more whole-brained scholastic experience, teachers should use instruction techniques that connect with both sides of the brain. They can increase their classroom's right-brain learning activities by incorporating more patterning, metaphors, analogies, role playing, visuals, and movement into their reading, calculation, and analytical activities.

**Assessment**—For a more accurate whole-brained evaluation of student learning, educators must develop new forms of assessment that honour right-brained talents and skills.

**Reading**

Bernice McCarthy, *The 4-MAT System: Teaching to Learning Styles with Right/Left Mode Techniques*.

V. **Control Theory**

**Definition**

This theory of motivation proposed by William Glasser contends that behaviour is never caused by a response to an outside stimulus. Instead, the control theory states that behaviour is inspired by what a person wants most at any given time: survival, love, power, freedom, or any other basic human need.

**Discussion**

Responding to complaints that today's students are "unmotivated," Glasser attests that all living creatures "control" their behaviour to maximize their need satisfaction. According to Glasser, if students are not motivated to do their schoolwork, it's because they view schoolwork as irrelevant to their basic human needs.

**Boss teachers** use rewards and punishment to coerce students to comply with rules and complete required assignments. Glasser calls this "leaning on your shovel" work. He shows how high percentages of students recognize that the work they do—even when their teachers praise them—is such low-level work.
Lead teachers, on the other hand, avoid coercion completely. Instead, they make the intrinsic rewards of doing the work clear to their students, correlating any proposed assignments to the students' basic needs. Plus, they only use grades as temporary indicators of what has and hasn't been learned, rather than a reward. Lead teachers will "fight to protect" highly engaged, deeply motivated students who are doing quality work from having to fulfill meaningless requirements.

How the Control Theory Impacts Learning
Curriculum--Teachers must negotiate both content and method with students. Students' basic needs literally help shape how and what they are taught.

Instruction--Teachers rely on cooperative, active learning techniques that enhance the power of the learners. Lead teachers make sure that all assignments meet some degree of their students' need satisfaction. This secures student loyalty, which carries the class through whatever relatively meaningless tasks might be necessary to satisfy official requirements.

Assessment--Instructors only give "good grades"--those that certify quality work--to satisfy students' need for power. Courses for which a student doesn't earn a "good grade" are not recorded on that student's transcript. Teachers grade students using an absolute standard, rather than a relative "curve."

Reading

VI. Observational Learning

Definition
Observational learning, also called social learning theory, occurs when an observer's behaviour changes after viewing the behaviour of a model. An observer's behaviour can be affected by the positive or negative consequences--called vicarious reinforcement or vicarious punishment--of a model's behaviour.

Discussion
There are several guiding principles behind observational learning, or social learning theory:

1. The observer will imitate the model's behaviour if the model possesses characteristics--things such as talent, intelligence, power, good looks, or popularity--that the observer finds attractive or desirable.
2. The observer will react to the way the model is treated and mimic the model's behaviour. When the model's behaviour is rewarded, the observer is more likely to reproduce the rewarded behaviour. When the model is punished, an example of vicarious punishment, the observer is less likely to reproduce the same behaviour.
3. A distinction exists between an observer's "acquiring" a behaviour and "performing" a behaviour. Through observation, the observer can acquire the behaviour without performing it. The observer may then later, in situations where there is an incentive to do so, display the behaviour.
4. Learning by observation involves four separate processes: attention, retention, production and motivation.
   - Attention: Observers cannot learn unless they pay attention to what's happening around them. This process is influenced by characteristics of the model, such as how much one likes or identifies with the model, and by characteristics of the observer, such as the observer's expectations or level of emotional arousal.
   - Retention: Observers must not only recognize the observed behaviour but also remember it at some later time. This process depends on the observer's ability to code or structure the information in an easily remembered form or to mentally or physically rehearse the model's actions.
   - Production: Observers must be physically and intellectually capable of producing the act. In many cases the observer possesses the necessary responses. But sometimes, reproducing the model’s actions may involve skills the observer has not yet acquired. It is one thing to carefully watch a circus juggler, but it is quite another to go home and repeat those acts.
   - Motivation: In general, observers will perform the act only if they have some motivation or reason to do so. The presence of reinforcement or punishment, either to the model or directly to the observer, becomes most important in this process.

5. Attention and retention account for acquisition or learning of a model's behaviour; production and motivation control the performance.

6. Human development reflects the complex interaction of the person, the person's behaviour, and the environment. The relationship between these elements is called reciprocal determinism. A person's cognitive abilities, physical characteristics, personality, beliefs, attitudes, and so on influence both his or her behaviour and environment. These influences are reciprocal, however. A person's behaviour can affect his feelings about himself and his attitudes and beliefs about others. Likewise, much of what a person knows comes from environmental resources such as television, parents, and books. Environment also affects behaviour: what a person observes can powerfully influence what he does. But a person's behaviour also contributes to his environment.

How Observational Learning Impacts Learning:

Curriculum-- Students must get a chance to observe and model the behaviour that leads to a positive reinforcement.

Instruction-- Educators must encourage collaborative learning, since much of learning happens within important social and environmental contexts.

Assessment--A learned behaviour often cannot be performed unless there is the right environment for it. Educators must provide the incentive and the supportive environment for the behaviour to happen. Otherwise, assessment may not be accurate.

Reading
VII. Vygotsky and Social Cognition

Definition
The social cognition learning model asserts that culture is the prime determinant of individual development. Humans are the only species to have created culture, and every human child develops in the context of a culture. Therefore, a child's learning development is affected in ways large and small by the culture--including the culture of family environment--in which he or she is enmeshed.

Discussion

1. Culture makes two sorts of contributions to a child's intellectual development. First, through culture children acquire much of the content of their thinking, that is, their knowledge. Second, the surrounding culture provides a child with the processes or means of their thinking, what Vygotskians call the tools of intellectual adaptation. In short, according to the social cognition learning model, culture teaches children both what to think and how to think.
2. Cognitive development results from a dialectical process whereby a child learns through problem-solving experiences shared with someone else, usually a parent or teacher but sometimes a sibling or peer.
3. Initially, the person interacting with child assumes most of the responsibility for guiding the problem solving, but gradually this responsibility transfers to the child.
4. Language is a primary form of interaction through which adults transmit to the child the rich body of knowledge that exists in the culture.
5. As learning progresses, the child's own language comes to serve as her primary tool of intellectual adaptation. Eventually, children can use internal language to direct their own behaviour.
6. Internalization refers to the process of learning--and thereby internalizing--a rich body of knowledge and tools of thought that first exist outside the child. This happens primarily through language.
7. A difference exists between what child can do on her own and what the child can do with help. Vygotskians call this difference the zone of proximal development.
8. Since much of what a child learns comes form the culture around her and much of the child's problem solving is mediated through an adult's help, it is wrong to focus on a child in isolation. Such focus does not reveal the processes by which children acquire new skills.
9. Interactions with surrounding culture and social agents, such as parents and more competent peers, contribute significantly to a child's intellectual development.

How Vygotsky Impacts Learning:
Curriculum--Since children learn much through interaction, curricula should be designed to emphasize interaction between learners and learning tasks.

Instruction--With appropriate adult help, children can often perform tasks that they are incapable of completing on their own. With this in mind, scaffolding--where the adult
continually adjusts the level of his or her help in response to the child's level of performance—is an effective form of teaching. Scaffolding not only produces immediate results, but also instills the skills necessary for independent problem solving in the future.

Assessment—Assessment methods must take into account the zone of proximal development. What children can do on their own is their level of actual development and what they can do with help is their level of potential development. Two children might have the same level of actual development, but given the appropriate help from an adult, one might be able to solve many more problems than the other. Assessment methods must target both the level of actual development and the level of potential development.

Reading


A paper by James Wertsch and Michael Cole titled "The role of culture in Vygotskyean-informed psychology". This paper gives an accessible overview of the main thrust of Vygotsky's general developmental framework and offers a contrast to the Piagetian approach.

This is an introduction to some of the basic concepts of Vygotskyean theory (culturally-mediated identity) by Trish Nicholl.

This is a site for Cultural-Historical Psychology and provides a periodically-updated listing of Vygotskyean and related resources available on the Web.

This is a 1997 paper by P.E. Doolittle titled "Vygotsky’s zone of proximal development as a theoretical foundation for cooperation learning" and is published in Journal on Excellence in College Teaching, 8 (1), 83-103.
Authentic Assessment

Definition

Simply testing an isolated skill or a retained fact does not effectively measure a student’s capabilities. To accurately evaluate what a person has learned, an assessment method must examine his or her collective abilities. This is what is meant by authentic assessment. Authentic assessment presents students with real-world challenges that require them to apply their relevant skills and knowledge.

Basic Elements

Authentic assessment accomplishes each of the following goals:

Requires students to develop responses rather than select from predetermined options

Elicits higher order thinking in addition to basic skills

Directly evaluates holistic projects

Synthesizes with classroom instruction

Uses samples of student work (portfolios) collected over an extended time period

Stems from clear criteria made known to students

Allows for the possibility of multiple human judgments

Relates more closely to classroom learning

Teaches students to evaluate their own work

"Fairness" does not exist when assessment is uniform, standardized, impersonal, and absolute. Rather, it exists when assessment is appropriate—in other words, when it's personalized, natural, and flexible; when it can be modified to pinpoint specific abilities and function at the relevant level of difficulty; and when it promotes a rapport between examiner and student.
Authentic assessment is designed to be criterion-referenced rather than norm-referenced. Such evaluation identifies strengths and weaknesses, but does not compare or rank students.

Authentic assessment is often based on performance: Students are asked to demonstrate their knowledge, skills, or competencies in whatever way they find appropriate.

There are several challenges to using authentic assessment methods. They include managing its time-intensive nature, ensuring curricular validity, and minimizing evaluator bias.

Recommended Reading


Classroom Assessment

Definition

Classroom Assessment Techniques consist of a variety of feedback and discussion methods that gauge the quality of the learning process.

Basic Elements

Classroom Assessment Techniques (CATs), also known as Classroom Research or Action Research, are a series of tools and practices designed to give teachers accurate information about the quality of student learning. Information gathered isn't used for grading or teacher evaluation. Instead, it's used to facilitate dialogue between students and teacher on the quality of the learning process, and how to improve it. As authors Patricia Cross and Thomas Angelo state in their book *Classroom Assessment Techniques*, "Teaching without learning is just talking." CATs provide both teachers and students with "in process" information on how well students are learning what the curriculum intends.

The three basic questions CATs ask are:

1. What are the essential skills and knowledge I am trying to teach?
2. How can I find out whether students are learning them?
3. How can I help students learn better?

The classroom assessment process assumes that students need to receive feedback early and often, that they need to evaluate the quality of their own learning, and that they can help the teacher improve the strength of instruction.

The basic steps in the classroom assessment process are:

1. Choose a learning goal to assess
2. Choose an assessment technique
3. Apply the technique
4. Analyse the data and share the results with students
5. Respond to the data

CATs provide teachers with a "menu" of evaluation tools that:

1. Check for student background knowledge
2. Identify areas of confusion
3. Enable students to self-assess their learning level
4. Determine students’ learning styles
5. Target and build specific skills

Reading

*Classroom Assessment Techniques*, by K. Patricia Cross and Thomas Angelo.

**Portfolio Assessment**

**Definition**

Portfolio assessment provides a body of student work--essentially, a portfolio--that can be used to appraise student performance over time.

**Discussion**

Portfolio assessment ranges from portfolios that demonstrates the student's best work to an "expanded student record" that holds a full representation of the student's work, from math equations to essays on literature. There has been some confusion in the field as to who the portfolio is being kept for. For example, in some cases, student portfolios serve as a replacement for the high school diploma or transcript.

The disadvantage of portfolios is that they're not as quick and easy to evaluate, plus they're hard to rank, as with a grade or score. Because portfolios are qualitative, many employers find them difficult to use as a determinant of a candidate's skills. Often, employers would rather see a quantitative demonstration of a student's best skills and work.

Some schools create portfolios that serve as a representative sample of a student's work, showing the range of performance and experience. Such records usually hold far more information that employers need. Other schools want to use portfolios as an assessment tool to provide an alternative to standardized or teacher testing.

In some schools there has been much discussion on who "owns" the portfolio, the student or the school? Ownership implies who gets to decide what goes into the portfolio, where the portfolio is stored, and what happens to the portfolio after graduation.

Let's look the implications portfolios have on the following elements of education:
• **Curriculum**—Some people believe that using portfolios will enable teachers to broaden their curriculum to include areas they traditionally could not assess with standardized testing. How well this works depends on how much a curriculum is developed "to the test," in other words, how much curriculum is geared towards achieving high test scores rather than learning for learning's sake.

• **Instruction**—Portfolio assessment appears to compliment a teacher's use of instructional strategies centered around teamwork, projects, and applied learning. Portfolios are also compatible with more individualized instruction, as well as strategies focused on different learning styles.

• **Assessment**—A portfolio can be used as an assessment tool. External assessors--employers, evaluation panels, and so on--can benefit from them. Teachers can also utilize them to judge student performance. Plus, students can use their own portfolios for self-assessment and reflection.
Emotional Intelligence

In a 1994 report on the current state of emotional literacy in the U.S., author Daniel Goleman stated: "...in navigating our lives, it is our fears and envies, our rages and depressions, our worries and anxieties that steer us day to day. Even the most academically brilliant among us are vulnerable to being undone by unruly emotions. The price we pay for emotional literacy is in failed marriages and troubled families, in stunted social and work lives, in deteriorating physical health and mental anguish and, as a society, in tragedies such as killings..."
Goleman attests that the best remedy for battling our emotional shortcomings is preventive medicine. In other words, we need to place as much importance on teaching our children the essential skills of Emotional Intelligence as we do on more traditional measures like IQ and GPA.

Exactly what is Emotional Intelligence? The term encompasses the following five characteristics and abilities:

1. **Self-awareness**--knowing your emotions, recognizing feelings as they occur, and discriminating between them
2. **Mood management**--handling feelings so they're relevant to the current situation and you react appropriately
3. **Self-motivation**--"gathering up" your feelings and directing yourself towards a goal, despite self-doubt, inertia, and impulsiveness
4. **Empathy**--recognizing feelings in others and tuning into their verbal and nonverbal cues
5. **Managing relationships**--handling interpersonal interaction, conflict resolution, and negotiations

Why Do We Need Emotional Intelligence?

Research in brain-based learning suggests that emotional health is fundamental to effective learning. According to a report from the National Center for Clinical Infant Programs, the most critical element for a student's success in school is an understanding of how to learn. (*Emotional Intelligence*, p. 193.) The key ingredients for this understanding are:
Confidence
Curiosity
Intentionality
Self-control
Relatedness
Capacity to communicate
Ability to cooperate
These traits are all aspects of Emotional Intelligence. Basically, a student who learns to learn is much more apt to succeed. Emotional Intelligence has proven a better predictor of future success than traditional methods like the GPA, IQ, and standardized test scores.

Hence, the great interest in Emotional Intelligence on the part of corporations, universities, and schools nationwide. The idea of Emotional Intelligence has inspired research and curriculum development throughout these facilities. Researchers have concluded that people who manage their own feelings well and deal effectively with others are more likely to live content lives. Plus, happy people are more apt to retain information and do so more effectively than dissatisfied people.

Building one's Emotional Intelligence has a lifelong impact. Many parents and educators, alarmed by increasing levels of conflict in young schoolchildren—from low self-esteem to early drug and alcohol use to depression, are rushing to teach students the skills necessary for Emotional Intelligence. And in corporations, the inclusion of Emotional Intelligence in training programs has helped employees cooperate better and motivate more, thereby increasing productivity and profits.

"Emotional Intelligence is a master aptitude, a capacity that profoundly affects all other abilities, either facilitating or interfering with them."—Daniel Goleman, Emotional Intelligence, p. 80.
### Appendix 9:
**Glossary of Gifted Education**

**A Gifted & Talented jargon buster - to make life a bit easier!**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able</td>
<td>A general term for someone showing above average achievement.</td>
</tr>
<tr>
<td>Acceleration</td>
<td>Where a pupil continues to follow the standard curriculum, but progresses at a faster rate than other children in the same year group. (This may involve working with a different year group.)</td>
</tr>
<tr>
<td>Barriers to learning</td>
<td>Reasons why a child is not achieving full potential.</td>
</tr>
<tr>
<td>Brain Gym</td>
<td>Exercises to ‘warm up’ the brain.</td>
</tr>
<tr>
<td>Challenge</td>
<td>Where an individual has to strive for success. The level of challenge, in any context may be varied, by altering: the pace, questions, amount of independence, task, imposing limitations, recording method, etc. The level of appropriate challenge varies between individuals.</td>
</tr>
<tr>
<td>Characteristic Checklists</td>
<td>List of characteristics / behaviours, which gifted or talented children may exhibit. (Lists may be different for different subject areas.)</td>
</tr>
<tr>
<td>Cognitive ability</td>
<td>The ability to think and understand.</td>
</tr>
<tr>
<td>Community-based opportunities</td>
<td>Out of school opportunities, to develop talent. May be local or national clubs, classes or schemes. May also include internet sites. Ideally, schools will alert their gifted &amp; talented children and their parents to appropriate opportunities.</td>
</tr>
<tr>
<td>Creativity</td>
<td>The ability to think and approach a problem in an original or flexible way. May be applied to any subject area.</td>
</tr>
<tr>
<td>Creativity tests</td>
<td>An identification method, which does not rely on current attainment.</td>
</tr>
<tr>
<td>Curriculum compacting</td>
<td>The normal curriculum is followed, but completed in less time. This then leaves time for another style of provision.</td>
</tr>
<tr>
<td>De Bono (Edward)</td>
<td>Theory of the 6 thinking hats.</td>
</tr>
<tr>
<td>Differentiation</td>
<td>A general term used to describe the whole range of strategies, which can be used to ensure that children’s needs are met appropriately. (Not just high achievers.)</td>
</tr>
<tr>
<td>Early achievers</td>
<td>Children who achieve in advance of their year group.</td>
</tr>
<tr>
<td>Early entry</td>
<td>When a pupil is entered for an exam before the usual age of entry.</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>The wider range of qualities which enable people to excel – self-awareness, impulse control, persistence, empathy, etc. (Daniel Goleman)</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Enrichment</td>
<td>Where a pupil is given the opportunity to explore a subject in a broader sense, either working on a more complex task with several objectives, or in a different context (even abstraction). This may involve exploring areas of learning that other pupils do not cover. It may take place in or out of the normal classroom environment.</td>
</tr>
<tr>
<td>Enrichment days</td>
<td>Where a whole day is given over to enrichment activities.</td>
</tr>
<tr>
<td>Extension</td>
<td>Using higher order thinking skills to develop a deeper understanding of a subject.</td>
</tr>
<tr>
<td>Fast Tracking</td>
<td>Any system which enables pupils to take qualifications earlier than other children in their year group.</td>
</tr>
<tr>
<td>Fisher, Robert</td>
<td>He sees the following key qualities as ‘providing opportunities for intellectual growth’: awareness, perseverance, risk-taking, sensitivity, curiosity, imagination, fluency, flexibility, originality, and elaboration.</td>
</tr>
<tr>
<td>Flow</td>
<td>The state of mind reached, when expectations are matched to the level necessary in order to provide appropriate challenge. (Csikszentmihalyi).</td>
</tr>
<tr>
<td>Gagné</td>
<td>Developed a Differentiated Model of Giftedness and Talent. 5-domain theory.</td>
</tr>
<tr>
<td>Gardner, Howard</td>
<td>Developed the theory of 8 possible domains of Intelligence: (Multiple Intelligences): linguistic, logical-mathematical, musical, spatial, bodily-kinaesthetic, interpersonal/ intrapersonal, naturalistic. (Naturalistic is a later 8th addition)</td>
</tr>
<tr>
<td>GIFT</td>
<td>An organisation, which provides curriculum extension courses.</td>
</tr>
<tr>
<td>Gifted child –</td>
<td>Children with high achievement or potential for high achievement in mainstream academic subjects. Top 5-10% in each school.</td>
</tr>
<tr>
<td>Goleman</td>
<td>See emotional intelligence.</td>
</tr>
<tr>
<td>Higher Order Thinking</td>
<td>Taken from Bloom’s taxonomy, higher order thinking includes Synthesis, Evaluation and Analysis.</td>
</tr>
<tr>
<td>Identification</td>
<td>Any process where the aim is to identify gifted &amp; talented children. EiC schools must identify the top 5-10% of their school population. Methods include: test results, diagnostic assessment of work, characteristic checklists, class observations (in normal or specially provided lessons), nomination, (by teacher, parent, peers or self).</td>
</tr>
<tr>
<td>IEP</td>
<td>Individual Education Program. Not legislatively-based. Should, however, be shared with parents to ensure maximum effectiveness.</td>
</tr>
<tr>
<td>Independent Learning</td>
<td>Opportunities provided for children to work independently. This may take place within a variety of learning contexts and doesn’t necessarily mean there is no guidance or structure at all.</td>
</tr>
<tr>
<td>IQ tests</td>
<td>Assessments which measure intelligence and which give a score against a national average.</td>
</tr>
<tr>
<td>Like-minded peers</td>
<td>Pupils of similar ability, social development stage, interests. Opportunities should be provided for all pupils to work with like-minded peers.</td>
</tr>
<tr>
<td>Maslow</td>
<td>Hierarchy of Human Needs. Provides us with a model for catering for the holistic needs of the gifted and talented.</td>
</tr>
<tr>
<td>Masterclass</td>
<td>A class specifically for high achievers to study at an advanced level.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Metacognition</td>
<td>The understanding of how learning takes place.</td>
</tr>
<tr>
<td>Mind maps</td>
<td>Drawings which show the links which can aid understanding and memory.</td>
</tr>
<tr>
<td>Motivation</td>
<td>Can be raised through providing opportunities for challenge, knowledge and fun.</td>
</tr>
<tr>
<td>Multiple Intelligences</td>
<td>Intelligences can be in a variety of forms. They are not restricted to purely intellective. (eg: Gardner, Sternberg)</td>
</tr>
<tr>
<td>Network Coordinator</td>
<td>Person (often a teacher) who co-ordinates the G&amp;T project within the local network.</td>
</tr>
<tr>
<td>Nomination</td>
<td>Where a pupil is identified as being gifted or talented. This method may include a variety of methods: gut feeling, standard of class work, assessment results, characteristic checklists, etc. Nomination may be by class teachers, other teachers, parents, peers, the child him/her self.</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>The approach to teaching</td>
</tr>
<tr>
<td>Provision</td>
<td>May be through class differentiation, enrichment, extension, acceleration, out of school opportunities, clubs, IDPs', withdrawal from class, etc.</td>
</tr>
<tr>
<td>Reflection</td>
<td>Time needs to be given for reflection, in order to stimulate metacognition, and to refine and develop outcomes.</td>
</tr>
<tr>
<td>Renzulli</td>
<td>Developed a three-ring model of giftedness, which includes: task commitment, creativity, above average ability.</td>
</tr>
<tr>
<td>Responsible Teacher (RT)</td>
<td>A teacher in school responsible for “championing the cause of gifted and talented children”.</td>
</tr>
<tr>
<td>Scaffolding</td>
<td>Where a pupil is shown how to do something new and then tries it for him/herself. This can be a useful tool for identification.</td>
</tr>
<tr>
<td>Setting</td>
<td>Where children are ability grouped across a year group or more than one year group.</td>
</tr>
<tr>
<td>Sternberg</td>
<td>Triarchic theory of intelligence: He states three areas: analytic, creative and practical.</td>
</tr>
<tr>
<td>Tannenbaum</td>
<td>He described four categories of talents: Scarcity, Surplus, Quota, Anomalous.</td>
</tr>
<tr>
<td>Underachiever</td>
<td>A child who is not achieving his / her potential.</td>
</tr>
<tr>
<td>VAK</td>
<td>Visual, Auditory, Kinaesthetic. Most people have a preferred learning style. They learn best by watching, listening or doing. Good lessons incorporate elements of each, so that every pupil can access the given curriculum.</td>
</tr>
<tr>
<td>Vygotsky</td>
<td>Developed the concept of the zone of proximal development: the distance between the actual development as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance. From this was developed the idea of scaffolding learning.</td>
</tr>
<tr>
<td>World Class Tests</td>
<td>Tests designed to assess potential for high achievement.</td>
</tr>
</tbody>
</table>
Appendix 10:

Australian Support Groups

Australasian Gifted Support Groups - Contact Info Provides up-to-date contact information for
Australasian support groups for gifted children and their teachers and parents

- **Australian Association for the Education of the Gifted & Talented** (AAEGT), 2-8
  Grand Ave, Westmead NSW 2145, ph (02) 9633 5399, fax (02) 9633 5799
- **New Zealand Association for Gifted Children** (NZAGC), PO Box 46, Waitomo Caves, New Zealand
- **NSW Association for Gifted and Talented Children Inc** (NSWAGTC), Hilltop Road
  Public School, Hilltop Rd, Merrylands NSW 2160, ph (02) 9633 5399, fax (02) 9633 5799,
  email office@nswagtc.org.au
- **Victorian Association for Gifted and Talented Children Inc** (VAGTC), PO Box 814,
  Mulgrave VIC 3170, ph (03) 9486 9888
- **Victorian Affiliated Network Of Gifted Support Groups**, PO Box 88 Maldon Vic 3463,
  ph (03) 5475 2392
- **(VIC) CHIP Centre & Foundation**, 3 The Avenue, Windsor VIC 3181, ph (03) 9533 2881,
  fax (03) 9533 2883, email melissa@chip.edu.au
- **(VIC) Bayside Young Active Minds Support Group** (SE Melbourne) PO Box 2041
  Parkdale VIC 3195 email hirsts@melbpc.org.au
- **(VIC) Gifted & Talented Parent Support Network (Ballarat)** - contact Wendy Morley ph
  03 5341 2985
- **(VIC) WINGS (Western Information Network for Gifted Students)** - a parent support
  group in Melbourne's Western suburbs - phone Nancy Salvatico (03) 9367 5534, email
  wings@darteke.com.au
- **(VIC) Maroondah Gifted Children's Parents' Association** PO Box 1279 Croydon, VIC
  3136, contact Jo Freitag ph (03) 9725 0849
- **(VIC) Parents' Association for Children of Special Abilities Inc.** (PACSA) Box 2013
  Mail Centre Bendigo 3554 ph (03) 5475 2906 or (03) 5475 2392 email
  acairns@netcon.net.au
- **(VIC) Yarra Plenty Gifted Support Group** (N and NE Melbourne) Contact Pam Bourton
  ph (03) 5475 2906 email ypgsg@yahoo.com
- **Queensland Association for Gifted and Talented Children Inc** (QAGTC), 282 Stafford
  Rd, Stafford Qld 4053 ph (07) 3352 4288, fax (07) 3352 4388, email office@qagtc.org.au
- **(SA) Gifted & Talented Children's Association of South Australia Inc** (GTCSA), PO
  Box 1 Highgate SA 5063 phone (08) 8373 0500 email sueurban@bigpond.com.au
- **(WA) Gifted & Talented Children's Association of Western Australia** (GTCAWA), C/
  Meeralinga Young Children's Foundation, 1186 Hay St, West Perth WA 6005, ph (09) 450
  4530
- **(WA) ProApt (Professional Association for the Education of the Gifted)** (WA) C/
  Joondalup District PEAC Centre, 5 Savona Grove, Mindarie WA 6030, ph (08) 9407 8762,
  fax (09) 9407 8716, email joonpeac@iinet.net.au
- **Northern Territory Association for Gifted and Talented Children** (NTAGTC), C/ 8
  Thornton Ave, Mool NT 0810, ph (089) 22 1662
- **Tasmanian Association for the Gifted Inc** (TAG) GPO Box 1942, Hobart 7001, ph 03
  6227 9746.
Appendix 11:

Good Print Based Resources

A range of useful print resources for those interested in gifted children

Useful Print Resources - Journals

- *Gifted* journal of the NSW Association for Gifted & Talented Children Inc, aimed at parents and teachers, 5 issues pa, (comes with membership)
- *TalentEd* journal, informative resource for teachers and others interested in gifted & talented children, 4 issues pa, Editor Stan Bailey, Dept of Learning, Development & Communication, University of New England, Armidale NSW 2351, Australia
- *Our Gifted Children* aimed at parents and teachers, uses a fair amount of good American material (particularly reprinted from *Gifted Child Today*), 12 issues pa, Hawker Brownlow Education, 235 Bay Rd, Cheltenham VIC 3192, Australia
- *Gifted Education International* aims for international coverage, expensive but reputedly good, 3 issues pa, AB Academic Publishers, PO Box 42, Bicester Oxon OX6 7NW, England
- *Roeper Review* a refereed journal focusing on philosophical, moral and academic issues and developments in gifted education, Roeper City & Country School, PO Box 329, Bloomfield Hills MI 48303, United States
- *Gifted Child Today* recommended but takes a long time to travel seamail from the USA and much of the material is reprinted in *Our Gifted Children*, PO Box 637, Holmes PA 19043, United States

Useful Print Resources - Books

A strong and up-to-date Australian catalogue of gifted and talented resources is available from Dominie in Sydney on (02) 9905 0201, fax (02) 9905 5209.

In the following list of references, those marked with an asterisk have been recommended by Ed Cleaveland, National Coordinator, America Mensa's Gifted Children's Resource Program as being reasonably priced and lacking jargon (note this is not an endorsement by Mensa).

- Armstrong, Thomas (1991) *Awakening your child's natural genius: Enhancing curiosity, creativity and learning ability* New York; Putnam Publishing Group* - for parents of children aged 3-12
- Clark B (1983 - 2nd ed) *Growing up gifted: Developing the potential of children at home and at school* Columbus, Ohio: Merrill.
- Delisle JR (1987) *The gifted kids' survival guide* II Minneapolis: Free Spirit
- Eales, Connie (1983) *Raising your gifted child* Sydney: Angus & Robertson
- Kerr, B (1985) *Smart girls, gifted women* Ohio: Ohio Psychology Publishers
- Packer, Alex J (1992) *Bringing up parents: The teenager's handbook* Minneapolis: Free Spirit Publishing*
- Shore, Kenneth (1994) *The parents' public school handbook: How to make the most of your child's education from kindergarten through middle school* New York: Fireside/Simon & Schuster*
- Smutny, Joan F, Veenker, Kathleen & Veenker Stephen (1989) *Your gifted child: How to recognize and develop the special talents in your child from birth to age seven* New York: Ballantine Books*
- Vail, Priscilla L (1987) *Gifted, precocious or just plain smart: A story for puzzled parents* Rosemont, New Jersey: Programs for Education*