

## Defining gifted and talented students

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### Teachers entry beliefs about giftedness

What are the typical learning characteristics of students who are gifted ?

Regular classroom teachers frequently have inappropriate beliefs about gifted students and how they learn. These stereotypes influence how teachers recognise these students and how they teach them. The stereotypes frequently

- do not reflect the diversity of giftedness and do distinguish between different types of giftedness and talent.
- do not take account of how these students actually learn
- do not take account of how these students operate / present in the classroom, that is, their regular classroom personas. The stereotypes do not allow teachers to recognise accurately these students.

Classroom teachers need to know about

- how students who are gifted and talented learners learn, their learning characteristics and how these are displayed in the classroom.
- how to teach these students. This includes knowing how to
  - differentiate and elaborate the teaching of regular topics.
  - allow the gifted learning processes to 'evolve', that is, how students can learn driven by intrinsic motivation.
  - 'program' where necessary (for gifted students, this includes helping students see the need to be 'programmed', to do so in a way that is based on meaning rather than rote and to pave the programming themselves.
- how to provide feedback to these students. Feedback that makes comparisons with peers, that doesn't target the knowledge that is in place and that does not challenge further learning through open-ended questions is less effective.
- how to advise and counsel parents.
- how to counsel these students; how to help them understand and use their exceptionality to advantage.
- how to see their gifted learning capacities in a social and cultural context, to
  - understand peer interactions and influences
  - deal with concerns and worries about cultural issues
  - help them learn in groups
  - perceive consequences and implications.
- the range of curriculum and pedagogic options available to them and when to use each, for example,
  - when to use vertical knowledge extension (acceleration) versus horizontal broadening.

In any program intended to help teacher growth, it is important that teachers' existing knowledge be identified. To examine what teachers already know about gifted and talented students, you can

- have them state their beliefs about the typical learning characteristics of students who are gifted. Ask *What are the characteristics of gifted and talented students ?* Participants brainstorm. A typical list of characteristics:
  - giftedness isn't often reflected in academic learning and success
  - history - have a rich elaborated and differentiated set of ideas re a topic, give unexpected ideas and show breadth, have a reservoir of knowledge, able to use this to analyse situations, well organised for a self rather than in terms of cultural links (eg, text like) - a unique or ideosyncratic organisation
  - rapid retrieval
  - intrinsic motivation, inner drive to enquire, curious in specific domains, internal drive --> stickability, stubbornness, demanding, persistent
  - uneven development in areas of capacity
  - not easily programmed externally, for example, learning conventions of writing, spelling
  - have a level of empathy, maturity and understanding of emotional situation
  - teachers often say students are 'too emotional' but this is because these students have advanced cognition + emotion due to a lack of perceived power; they can predict, infer and think of possible outcomes and retrieve the relevant feelings that go with a lack of power. They need (1) acknowledgment of what they know or believe and (2) examine what actions they can take.
  - look beyond actual situations easily, infer, go beyond
  - intensity in the learning
- use the following chart to distinguish between gifted and bright able students.

For each of the following characteristics, indicate whether you believe it to more characteristic of gifted learners, able, bright learners or of neither group.

|  | gifted learners | able bright learners | neither group |
|--|-----------------|----------------------|---------------|
| Not easily programmed by others during teaching          | r               | r                    | r             |
| Makes links between ideas in unexpected, divergent ways  | r               | r                    | r             |
| Learns the ideas being taught well                       | r               | r                    | r             |
| Irritated by being structured or being directed to learn | r               | r                    | r             |
| Remembers well what was taught                           | r               | r                    | r             |
| Takes in new ideas as they are presented                 | r               | r                    | r             |
| Easily programmed by others during teaching              | r               | r                    | r             |
| Is extremely curious to learn new ideas                  | r               | r                    | r             |
| Prepared to learn new ideas                              | r               | r                    | r             |
| Takes ideas apart, extends and question them             | r               | r                    | r             |
| Thinks intensely about ideas being taught                | r               | r                    | r             |
| Creates a new design or a way of thinking                | r               | r                    | r             |
| Invents, builds new ideas                                | r               | r                    | r             |
| Receives new ideas from others well                      | r               | r                    | r             |
| May not present as achieving at a high level             | r               | r                    | r             |
| Shows own opinions and feelings about idea               | r               | r                    | r             |
| Infers, predicts about ideas "But what if ...?"          | r               | r                    | r             |
| Understands the taught ideas well                        | r               | r                    | r             |
| Prefers convergent tasks                                 | r               | r                    | r             |
| Usually satisfied with high level of success             | r               | r                    | r             |
| Applies ideas taught well                                | r               | r                    | r             |
| Invents problems, assignments                            | r               | r                    | r             |
| Invents own ways of solving problems                     | r               | r                    | r             |
| Completes set problems, assignments                      | r               | r                    | r             |
| Often highly self-critical of own learning               | r               | r                    | r             |
| Applies taught ways of solving problems                  | r               | r                    | r             |
| Initiates tasks, prefers open-ended direction            | r               | r                    | r             |
| Completes set assignments well                           | r               | r                    | r             |
| Enjoys being structured, directed to learn               | r               | r                    | r             |
| Prefers divergent problems                               | r               | r                    | r             |
| Links taught ideas with new ideas well                   | r               | r                    | r             |
| Achieves at a high level                                 | r               | r                    | r             |
| Is interested, prepared to learn new ideas               | r               | r                    | r             |
| Copies, imitates ideas well                              | r               | r                    | r             |

Task 1 Develop a procedure for determining what classroom teachers know about gifted and talented learning.

### An operational definition

An operational definition that differentiating between 'gifted' and 'talented' students :

- Talented student: one who displays exceptional creative ability in areas in which they have been explicitly taught.
- Gifted student: one who displays exceptional ability in areas in which they have not been explicitly taught.

*Examples of creative behaviors and outcomes* An outcome of thinking is creative if it

- shows high level understanding; rather than low level interpretation or application, the person has taken the ideas apart,
- shows novel connections between ideas quickly, shows that the person has inferred
- solves problems in unusual or novel ways

- asks complex questions about the ideas
- link ideas in lateral ways that are unexpected and surprise others ; it shows breadth of ideas
- shows evidence of thinking in several directions rather than in a single direction
- involved keep track of several ideas at once,
- shows the person was thinking in larger jump, skipping steps in the thinking,
- used imagination or fantasy, showed 'intellectual playfulness'.
- can be justified in some ways

### **Where this definition comes from**

**Definitions of giftedness** Some definitions do not distinguish between giftedness and talent :

- Gifted and talented children have outstanding abilities and are capable of high performance. They need differentiated educational programs and services beyond those normally provided by the regular program to realize their contribution to self and society (Marland, 1972 definition of the U.S. Office of Education). Children capable of high performance include those with demonstrated achievement and / or potential ability in any of the following areas.
  1. General intellectual ability
  2. Specific academic aptitude.
  3. Creative or productive thinking.
  4. Leadership ability.
  5. Visual and performing arts.
  6. Psychomotor ability (this category was later deleted).
- Gifted and talented children and youth have demonstrated or potential abilities that indicate high performance capability in areas such as intellectual, creative, specific academic or leadership ability or in the performing and visual and arts, and who require services or activities not ordinarily provided by the school (Gifted and Talented Children's Education Act, 1978, Section 902) to fully develop such capabilities (PL 100-297, Section 4103).
- Giftedness is the product of three interacting clusters of traits; above average intellectual ability, high levels of creativity and high levels of task commitment. Gifted and talented children have or can developing this set of traits and apply them to any potentially valuable area of human potential (Renzulli & Smith's (1980) definition).
- Gifted indicates any child who is outstanding in either a general or specific ability in a relatively broad or narrow field of endeavour (Ogilvie, 1973).
- Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. The uniqueness of the gifted renders them particularly vulnerable. (The Columbus Group, 1991).

These definitions differ :

- some are operational, intended to guide the identification of gifted students (U.S. Office of Education). They refer to past outstanding achievements in a valued area of human activity.
- some stress superior creativity as a major criterion.
- some clarify the characteristics of these students (Renzulli, Gagne, The Columbus Group).

**Giftedness versus talented** Some definitions distinguish between talent (outstanding performance in a specific area such as art, music, science) and giftedness (high level broad-based general ability). Perleth & Heller (1994), Cohn, (1981) and Differentiated Model of Giftedness and Talent (Gagne (1991) distinguish between these two concepts as follows;

**Giftedness -**  
 distinctly above average competences or aptitudes in intellectual, creative, socio-emotional or sensori-motor ability. They are

- untrained and displayed spontaneously.
- attributed in part to genetic sources
- observed in many of the tasks a person does.

They can be suppressed by environmental influences and are seen in young children.

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 motivation transforms giftedness into talent; through personal interests, personality traits and cultural influences

**Talent**  
 distinctly above-average competence in one or more fields of performance such as fine arts or performing arts. They are skills or abilities that

- are developed systematically
- emerge gradually as the aptitudes are transformed into skills in particular areas of activity.

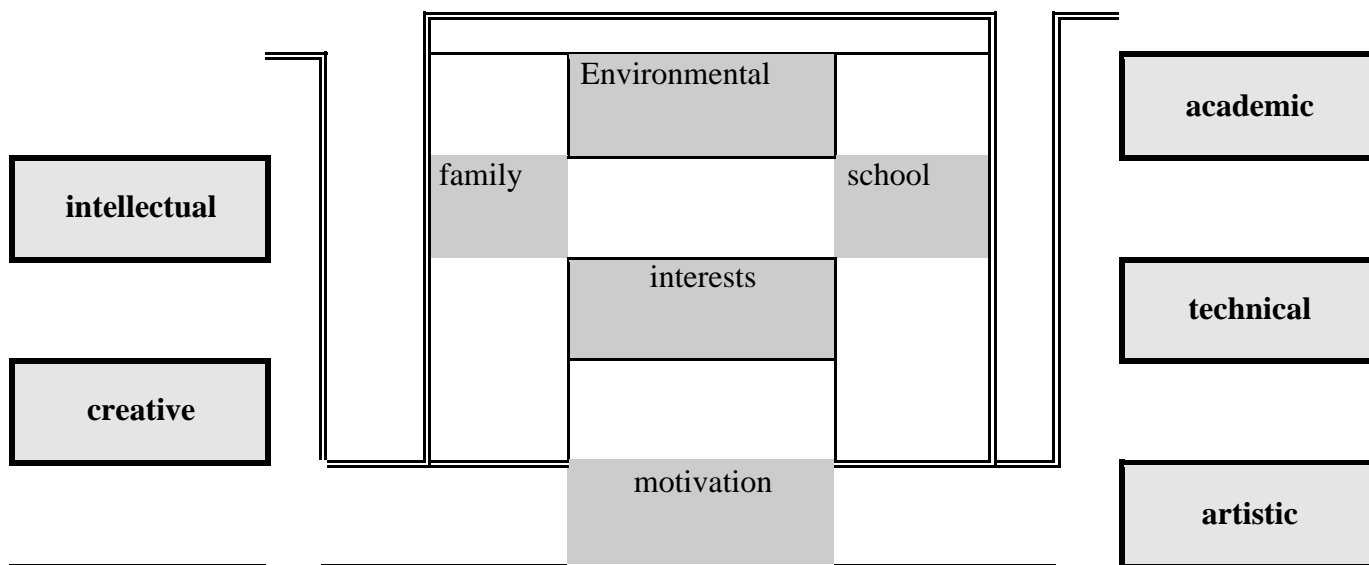
Individuals who are gifted may not necessarily be talented. are necessary.

**Areas of 'giftedness and talent**

|   |
|---|
| <ul style="list-style-type: none"> <li>• main domains of giftedness (Cohn) multiple general capacities or aptitudes of high ability (G)</li> <li>• independent abilities (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• intellectual gifts, comprising quantitative, verbal, spatial (Cohn),</li> <li>• linguistic, mathematical, technical (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• creative abilities (originality, productivity, elaboration, flexibility) (P &amp; H)</li> </ul>  |
| <ul style="list-style-type: none"> <li>• artistic gifts, ability in fine arts, performing arts</li> <li>• creative (Gagne)</li> <li>• musical and artistic abilities (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• social gifts, leadership, empathic / altruistic ability (C)</li> <li>• socioaffective (G)</li> <li>• social competence (planning ability, leadership, control of social interactions) (P &amp; H)</li> </ul> |
| <ul style="list-style-type: none"> <li>• sensorimotor (Gagne)</li> <li>• psychomotor (hand+ body motor skills) (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• practical intelligence (ability to manage daily and vocational challenges) (P &amp; H)</li> </ul>  |

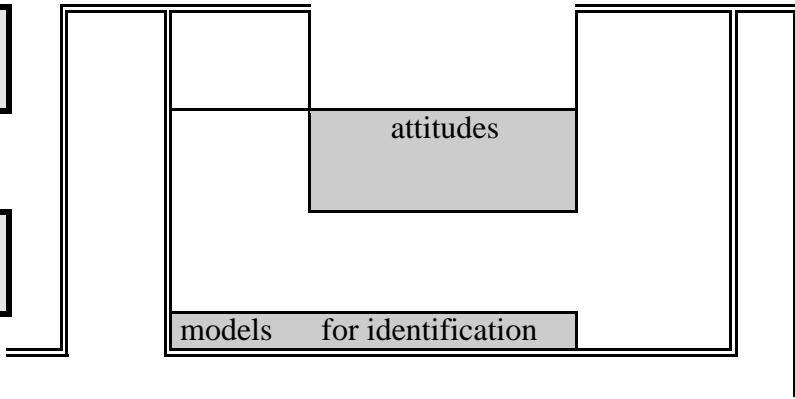
|   |
|---|
| specific talents (P & H)  |
| <ul style="list-style-type: none"> <li>• academic , technical (G)</li> <li>• maths, natural sciences, computer skills, technology, languages (P &amp; H)</li> </ul> |
| <ul style="list-style-type: none"> <li>• artistic (G)</li> <li>• art (music, painting) (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• interpersonal (G)</li> <li>• social relationships (P &amp; H)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• athletic (Gagne)</li> <li>• sports (P &amp; H)</li> </ul>  |

Gagne (1991) proposed a model in which learners have multiple general capacities or aptitudes of high ability. These are catalyzed through personal interests and personality traits and cultural influences into particular talents. This is the Differentiated Model of Giftedness and Talent:



**socioaffective**

**sensorimotor**



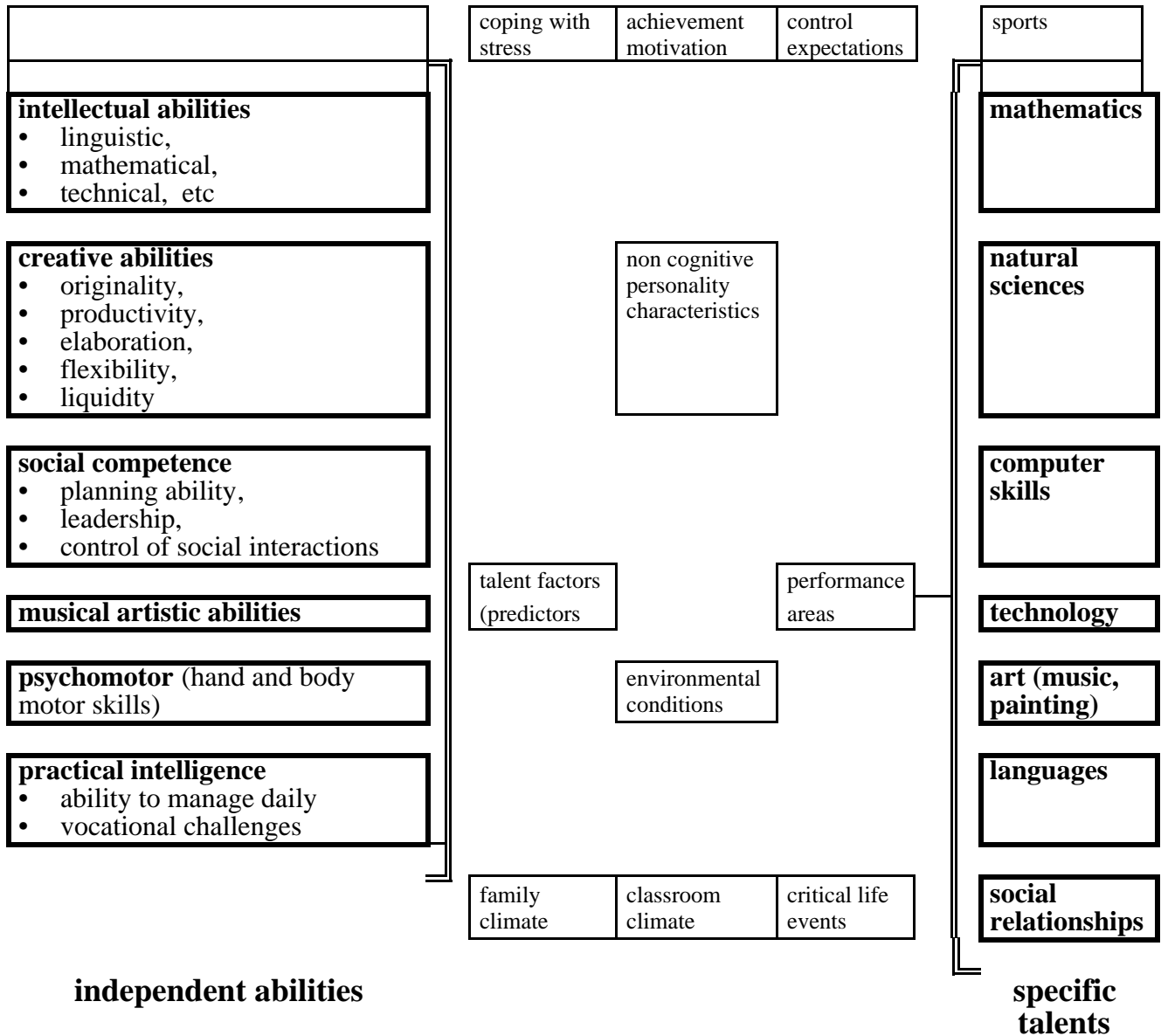
**interpersonal**

**athletic**

The model differentiates between giftedness and talent:

- The aptitudes are untrained and displayed spontaneously. They are attributed in part to genetic sources and can be observed in the majority of tasks a person performs. They can be suppressed by environmental influences and are most visible in young children.
- The talents are skills or abilities that are developed systematically. They emerge gradually as the aptitudes are transformed into skills in particular areas of activity.

Heller (Perleth & Heller, 1994) propose a similar multi-dimensional set of independent abilities that are associated with specific achievements or performances



Implications and limitations of each of the definitions. Operationalise each definition. What does each mean for selection and identification of students ?