Giftedness

- ► Generally display high levels of intelligence, academic achievement, creativity, or unique talents.
- ► 1925 Terman states that gifted = >140 IQ (highest 1%); intelligence determined by heredity
- Now --- many factors influence intelligence including genetics and environment; multiple intelligences.

Gifted and talented persons are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance.

At higher levels compared to others of the same age, experience, and environment in one or more domains.

They require modification(s) to their educational experience(s) to learn and realize their potential.

- Student with gifts and talents:
- ► Come from all racial, ethnic, and cultural populations, as well as all economic strata.

- Require sufficient access to appropriate learning opportunities to realize their potential.
- Can have learning and processing disorders that require specialized intervention and accommodation.
- Need support and guidance to develop socially and emotionally as well as in their areas of talent.

► Gifted child, any child who is naturally endowed with a high degree of general mental ability or extraordinary ability in a specific sphere of activity or knowledge.

► The designation of giftedness is largely a matter of administrative convenience.

In most countries the prevailing definition is an intelligence quotient (IQ) of 130 or above. Schools use multiple measures of giftedness and assess a wide variety of talents, including verbal, mathematical, spatial-visual, musical, and interpersonal abilities.

Defining giftedness

Broadly speaking, there have been three general approaches to defining giftedness (McAlpine, 2004):

▶ a conservative approach, which suggests a single criterion for giftedness (e.g., intelligence)

- a liberal approach, which uses a more broadranging and inclusive definition
- a multi-categorial approach, in terms of outstanding performance or potential in one or more areas (e.g., music, visual arts, leadership and other domains).

Three-Ring Conception of Giftedness

- Renzulli and Reis (1986)
- > Above average abilities (e.g., recall, early language) or specific abilities (e.g., advanced drawing skills)
- Task commitment, which comprises sustained motivation and attention in the development of ideas and products (e.g., the young child who stays at the carpentry table for long periods of time to complete a project)

Creativity, which involves problem solving, originality of thought, fluency, flexibility, and elaboration of ideas (e.g., the 18-monthold child who stacks chairs to see out a window).

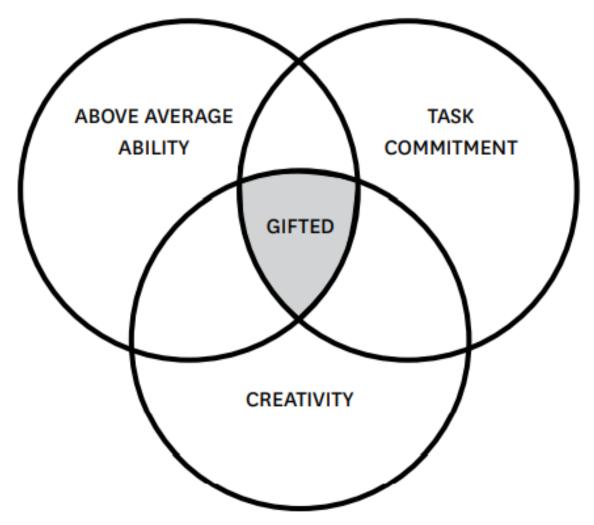


Figure 1.2. Three-Ring Conception of Giftedness Source: reproduced, with permission, from Renzulli and Reis, 1986

During the last hundred years different theories and models about giftedness have been developed.

- While human achievements in many domains have always found their rewards, there has been a substantial shift in the conceptions about giftedness since giftedness was defined as possessing a high intellect measurable by intelligence tests.
- Not surprisingly then, the work of Lewis M. Terman with children who were selected by their teachers because they showed what Joseph S. Renzulli describes as schoolhouse giftedness, found much more attention than the writings of Leta Stetter Hollingworth, who right from the beginning showed an interested in artistic performance, too.

Because of the results of Terman's long-term study, showing that highly intellectual people don't necessarily produce ground-shaking inventions, researchers got more concerned about the role of creativity and motivation for giftedness.

Renzulli tried to summarize these developments in his Three-Ring Conception of Giftedness.

Renzulli considers three factors important for the development of gifted behaviour: Above average ability, creativity, and task commitment.



Within the above average abilities Renzulli makes a difference between general abilities (like processing information, integrating experiences, and abstract thinking) and specific abilities (like the capacity to acquire knowledge, perform in an activity).

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Creativity

PBy creativity Renzulli understands the fluency, flexibility, and originality of thought, an openness to experience, sensitivity to stimulations, and a willingness to take risks.

Task commitment

Under task commitment he understands motivation turned into action (like perseverance, endurance, hard work, but also self-confidence, perceptiveness and a special fascination with a special subject).

Renzulli argues that without task commitment high achievement is simply not possible. Only if characteristics from all three rings work together can high achievement or gifted behaviour be witnessed.

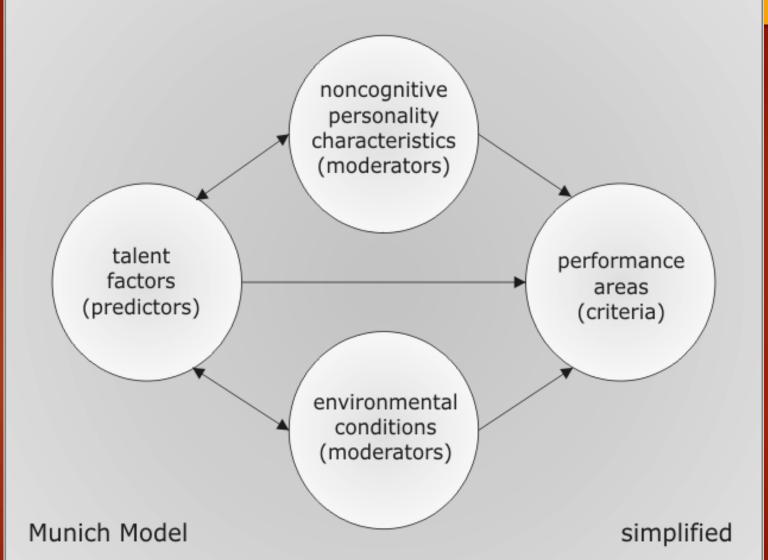
Recently Renzulli shifted his emphasis toward the background factors in his models, the personality and environmental factors influencing gifted behaviour.

The Munich Model of Giftedness

The Munich Model of Giftedness by Kurt A. Heller, Christopher Perleth and Ernst A. Hany uses a multifactorial approach to explain giftedness and the development of it.

The model is based on four interdependent multifactorial dimensions:

- talent factors (relatively independent),
- resulting performance areas,
- personality factors, and
- environmental factors;
- the latter two moderating the transition from talent (gifts) to performance.



In the Munich model the talent factors contain the following seven abilities:

- intellectual abilities,
- creative abilities,
- social competence,
- practical intelligence,
- artistic abilities,
- musicality,
- and psycho-motoric skills.

- Important noncognitive personality characteristics moderated by the talent factors and moderating talent and performance are:
- coping with stress,
- achievement motivation,
- learning and working strategies,
- control expectations,
- hope for success versus fear of failure,
- thirst for knowledge,
- and self-concept.

The eight performance areas are:

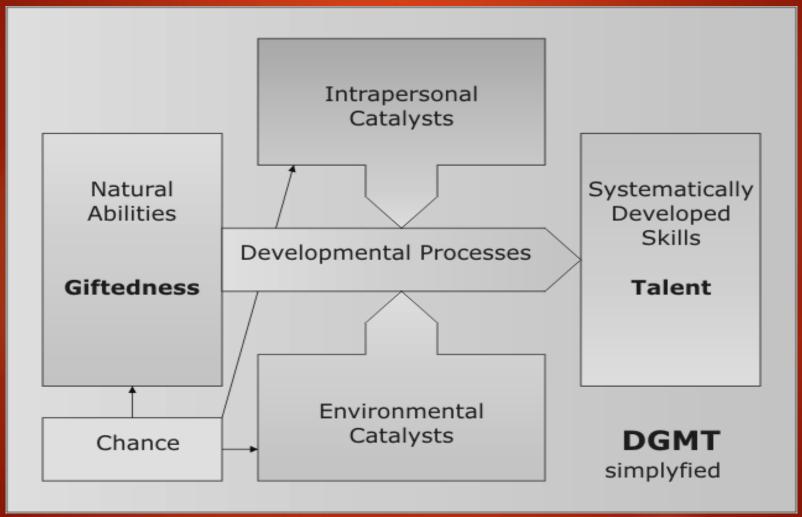
- mathematics,
- natural sciences,
- technology,
- computer science, chess,
- arts (music, painting),
- languages,
- athletics, sports,
- and social relationship.

Important environmental conditions moderated by the talent factors and moderating talent and performance are:

- family climate,
- number of siblings and sibling position,
- parental educational level,
- home environmental stimulation,
- demands and performance made at home,
- familiar learning environment,

- classroom climate,
- quality of instruction,
- differentiated learning and instruction,
- educational style,
- social reactions to success and failure,
- and critical life events.

Francoys Gagné differentiates clearly between gifts (natural abilities) and talents (systematically developed from gifts).



Gagné thinks that all talents are developed from natural abilities through learning influenced by inner and outer catalysts.

The main components of Gagné's model - which he refined several times - are:

Natural Abilities

Gagné lists four domains of natural abilities, which according to him are mostly genetically determined:

- intellectual abilities: reasoning, memory, sense of observation, judgement, and metacognition;
- creative abilities: inventiveness, imagination, originality, and fluency;
- socioaffective abilities: perceptiveness,
 communication (empathy and tact), and influence;
- sensorimotor abilities: sensitivity (the senses), strength, endurance, coordination and others.

Talent

The different fields are open to wider argumentation than the natural abilities. Gagné thinks the following fields are relevant for school-aged youths:

- academics,
- arts,
- business,
- ▶ leisure,
- social affection,
- sports,
- and technology.

Developmental Processes

Without learning processes whether there are

- informal as the learning of a first language by a child - or
- formal as most learning in school and practice gifts don't turn into talents.

Intrapersonal Catalysts

Several characteristics of the person influence the learning process positively or negatively. They are:

- physical characteristics like health,
- motivation and volition,
- self-management,
- and personality (temperament, self-esteem, adaptability etc.).

Environmental Catalysts

Gagné names four groups of environmental influences on the development of talents:

- milieu (culture, family)
- persons
- provisions (programs, activities, services)
- events

Chance

One last factor influencing

- the catalysts (intrapersonal and
- environmental) and
- the natural abilities (gifts) is chance.

Most importantly, chance determines through the recombination of paternal genes which types of giftedness a child possesses and to what extent.

