Interview (2):

Françoys Gagné

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Françoys Gagné is one of the leading figures in educational psychology and giftedness in the past 50 years. Born October 6, 1940 in Montreal, Canada, Françoys Gagné completed his B.A. in Psychology and his master's degree in 1962 and then his Ph.D. in psychology at the Université de Montreal. Dr. Gagné devoted the first decade of his career to setting up and directed a major research/ intervention program within the bilingual Quebec system of colleges. He joined the Université du Québec à Montréal (UQAM) in 1978 and began to study talent development (gifted education) as his new teaching/ research focus. Dr. Gagné devoted over two decades to his main research interests which included his theoretical work on the development of gifts and talents, the measurement of attitudes , and on the screening of students' gifts and talents by their peers and teachers.He has gained international renown and is mostly known by his theory of talent development: the Differentiating Model of Giftedness and Talent (DMGT). Professor Gagné has received many professional prizes, including the prestigious Distinguished Scholar Award (1996) from the National Association for Gifted Children (NAGC – USA).

In this interview, Professor Gagné shares with us his current work and reflects on the field of gifted education and his contributions to the field over several decades.

MS: Professor Gagné, I understand that you have a book about differentiating giftedness from talent. What brought this about?

FG: This book summarizes my vision of talent development through the DMGT (Differentiating Model of Giftedness and Talent). The DMGT was created almost four decades ago, and then evolved progressively in breadth and depth over the ensuing decades. As a new octogenarian aware of a diminishing life expectancy, I decided last year that it was time to bring together in one product the fruit of my thinking on talent development. I was hoping that it would become the 'bible' on that theoretical model.

The DMGT has its origins in a main observation I made within a few months of entering the field of gifted education in the late 1970s. Professionals in the field were defining the concept of giftedness in two distinct ways, either as outstanding potentialities or aptitudes, for instance high IQ scores, or as outstanding achievements or competencies, for instance high academic results. Indeed, professionals and scholars would confound most of the time the two meanings in their definitions and identification protocols, considering those they called 'gifted' students as 'bright high achievers.' I point out in the book many more incongruities that led me to label gifted education a 'conceptual Tower of Babel.'

MS: In reviewing your table of contents, I note that you have used the word "aptitude". How would you define this word and why is it relevant?

FG: Everyone — really everyone!—acknowledges the existence of innate potentialities or natural abilities that children possess in different degrees and that they will progressively transform, more or less completely, into achievements or realizations. Popular slogans reflect this common dichotomy: maximize your potential, develop your aptitudes to their fullest, etc. I chose the term aptitude to represent these natural abilities that appear very soon after birth and develop without any systematic instruction; they have their roots in biological underpinnings, themselves anchored in our genetic baggage. The DMGT proposes six major aptitude domains (see figure) that are extensively described in the book. Gifts correspond to outstanding aptitudes.

In the DMGT, 'outstanding' is operationalized as belonging to the top ten percent of same age peers on a relevant aptitude measure. The book discusses in detail that generous choice for the basic prevalence threshold, as well as more selective levels based on the metric system (top 1%, top 0,1%, top 1:10 000).

MS: Are there any tests that help teachers and parents differentiate between talent and giftedness?

FG: Readers probably guessed that the term talent corresponds to outstanding achievements or realizations. It confirms the large diversity of individual differences in achievements, from total incompetence to prodigious excellence. Again, the DMGT's basic threshold for talent is top ten percent, with metric-based subgroups similar to those adopted for gifts. The DMGT proposes nine major groups of talent fields (see figure), described in detail in the book.

The book describes major examples of measurements both for aptitude domains and talent fields. In the specific case of intellectual aptitudes, IQ tests represent the most adequate approach to assessing individual differences. Note that the DMGT distinguishes cognitive and creative aptitudes. The book proposes a clear definition of intelligence, a definition that goes hand in hand with the measures obtained with IQ tests. It is a well-known fact that cognitive aptitude is considered the best predictor of academic achievement, not only at K-12 levels but also within college levels. In the case of academic talent, general school achievement and achievement in specific subjects represent relevant measures of academic talent. Parents can also compare the achievement of their children in other fields (arts, sports, technology, etc.) to determine the presence of talent (top 10%) outside the academic realm.

MS: Why do you think it important to clearly differentiate between gifted and talented?

FG: The importance of this conceptual differentiation resides in the modest correlation between aptitude and achievement measures. In other words, if we use the DMGT's criteria of giftedness and talent, many intellectually gifted (GI) students do not become academically talented (TA). Similarly, many TA students do not manifest gifted-level intellectual aptitudes. The large number of gifted underachievers testifies to this limited overlap between the two groups. Indeed, I demonstrate in the book that the overlap between GI and TA students does not exceed 30%. Said differently, a majority of students are GI or TA, but few are simultaneously GI and TA. Note that this limited overlap applies equally well, sometimes even better, in the relationship between other domains and fields, for instance between physical aptitudes and achievements in athletics and sports.

MS: Also, you use the word "catalysts". Why is this word important and what are some of these catalysts?

FG: The DMGT figure shows five major groups, called components, of variables in talent development. The basic trio exemplifies the DMGT's definition of talent development, namely the progressive transformation (component D) of outstanding aptitudes (component G) into outstanding achievements (component T). The DMGT uses the term 'talentee' to identify any person actively involved in the development of a particular talent. The book explains how high aptitudes act as the building blocks of the high competencies that will be called talents.

The other two components (I and E) are called catalysts because they influence the developmental process without playing the role of building blocks; the book explains how their role is similar,

but not identical, to the catalysts common to most chemical processes. The DMGT distinguishes two major types of catalytic influences in the talent development process, influences within talentees (I component), as well as influences outside of them (E component). The DMGT figure shows the major subgroups of catalysts within components I and E; the book describes them in much more detail.

MS: Your DMGT figure highlights the background role of chance; is talent development just a lottery?

FG: To a significant extant, it is. The book examines that question in some detail. As an appetizer, let me quote a famous psychologist who said that 'all human accomplishments can be ascribed to two crucial rolls of the dice; one roll determines an individual's heredity, the other his formative environment.' Heredity affects significantly not only a person's aptitudes (all six domains), but also the nature and level of her intrapersonal catalysts (temperament, interests, volition). With respect to the E component, we are born and raised in a specific environment (country, culture, SES, parenting style) that we do not control, but that will promote or limit a person's talent development opportunities. Thus, every active talentee should be very grateful for the opportunities he/she received from both Nature and Nurture.

MS: You describe a very complex network of influences; are some of them more important than others?

FG: The book devotes a full chapter to that very important question, called 'What makes the difference?' I initially point out the uniqueness of talent development paths, stating that talents result from complex choreographies involving a multitude of fluctuating interactions between all components, subcomponents, and facets of the DMGT. Still, at the population level, some of the DMGT's elements have shown through accumulated research a higher degree of influence than others. Look at the DMGT figure, and try to identify which of the four causal groups of factors (G, D, I, E) tend on average to influence more the emergence of talents? Outstanding aptitudes? Time and energy investment in the learning process? Personality characteristics? Ambition? Passion? Will power? Autonomy? Affluent parents? Parenting style? Learning and training program? Good teachers and/or coaches? Chance factors?

In the book, I summarize my own proposal with the equation: C(G.I.D.E). If you want to know more, you know what to do!

MS: In terms of parenting a child who has multiple talents (piano, voice, violin) what do parents need to be aware of?

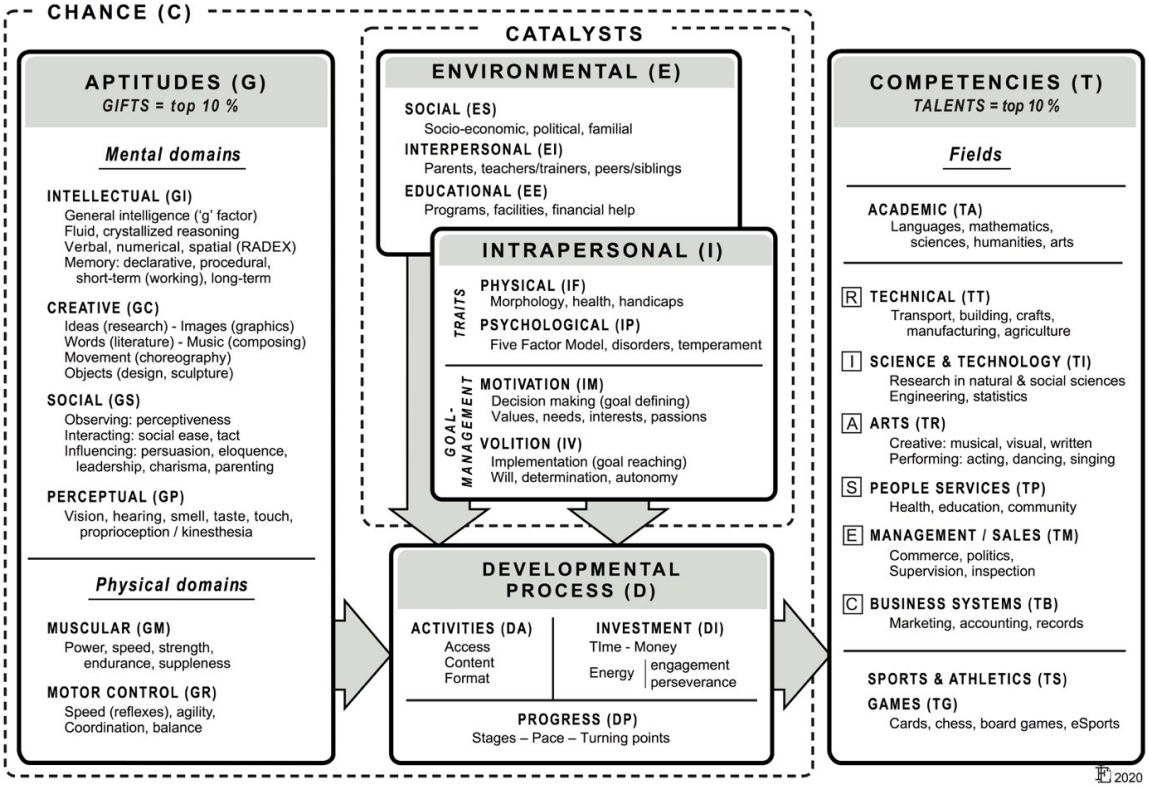
FG: This book focuses on the DMGT as an explanatory template. The figure should convince you that any factor that plays a significant role in talent development will find an appropriate space within that five-component model. One of its practical advantages resides as a checklist of potential sources of influence to be used by professionals and parents (and the talentees themselves) to examine the strengths and weaknesses of a particular talent development path. It also should constantly remind them that no single factor can properly synthesize the complex individual choreographies mentioned above.

The book does not discuss how to best promote adequate talent development to talentees. This is a question that puts the focus on the E component (policies, structures, significant people); it also addresses a 'what should be' question, whereas the DMGT was developed to address a 'what is' question. A second book, currently in the works, will try to answer these questions, but within the realm of academic talent development.

MS: Finally, what would you consider to be the unique qualities of your DMGT?

FG: There are many of them; in the self-extolling finale of the book—one is never better served than by oneself!—I identify twenty-six unique qualities. Here are just a few: a) a clear distinction

between aptitudes (gifts) and achievements (talents); b) clear and concrete definitions of all major concepts; c) detailed structure (see figure) for the aptitude domains and the competency fields; d) clear answer to the prevalence ('how many') question; e) a precise differentiated role given to aptitudes (as building blocks) and intrapersonal/environmental influences (as catalysts); f) an honest questioning of undue environmentalism by giving appropriate space to genetics; g) the recognition of chance (lack of control) as a major component of the talent development process.



MS: Thank you, professor Gagné, for this interesting overview of a fascinating and unique talent development model. [with due modesty !!!]

About the Author

Michael F. Shaughnessy is currently Professor of Eastern New Mexico University in Portales, New Mexico. He received his doctorate from the University of Nebraska in Lincoln, Nebraska. He has served as Editor in Chief of Gifted Education International and on the Editorial Boards of several journals. His research interests include intelligence testing and personality factors related to giftedness, talent and creativity.

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