

APPROACHES OF THE TALENT RESEARCH

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I undertake the presentation of those theoretical connections and approaches in my study which examine the identified talents' thinking operations, learning abilities. Thinking is the process in which the new mental representation of the information comes into existence as the result of a new abstraction, inference, problem-solving. The thinking operations are the toolbars of the thinking ability which help to solve such subtasks that lead to the definite solution of the problems. The early identification of the individual patterns of thinking operations helps to define the competence development. In my opinion the early identification of the characteristics of thinking operations can be realized by the time of secondary studies. The individual patterns of thinking operations make the definition of personalised thinking profiles possible. In the case of defining the directed operations and fields of thinking of such a degree, the opportunity may arise to define the directions of individual development. The identification of thinking operations belonging to the competence areas of different trades, professions and the comparison of the individual's thinking profile may provide an opportunity to define the preferences when choosing an occupation and related development plans.

Keywords: K12 students, talented children, finding of talented students

I start the topic suggested in the title of my study with a brief overview of the models of the development of the talent. The reason for this is due to the fact that while examining the models of talent development, an idea was born, that is the identification of thinking operations giving the basis or "toolbars" of our way of thinking and problem solving is possible. One of the most sensible options to identify thinking operations might arise during students' task solving. Such cognitive operations must be measured that are needed for problem solving during learning, and then a personal cognitive operational profile can be drawn for each student. If this personal thinking operational profile is matched with the cognitive operations expected or desired in trades or groups of trades, the similarities may give input information about the profession-specific suitability of the students. If the measurement of thinking operations and the determination of the individual profile may take place "early", then this information can play a role in determining career orientation. The early recognized and identified thinking

operational profile, and the development of occupational groups fitting to it the best may begin even in the context of public education, therefore the development of students can be started towards the direction of their existing skills and the development of the profession fitting to it. In my study I undertake to demonstrate the theoretical contexts and approaches which examine the identified talents' - taking into account their socio-cultural background - operations of thinking and learning skills compared with basic competences related to the managerial functions in the study. The determination of these basic competences, and related thinking operations in the case of trades and professional groups can make it possible to determine early career directions, but at least it gives a minimum input for the decision.

In my opinion, talent development aiming at career guidance, based on the scientific measurement of the forementioned factors, it can be started as early as at the end of primary school education. If the assumed correlations are supported, we can start the developing program within the framework of public education for the suitable students. The program preparing for different professional tasks would be particularly useful for students from disadvantaged socio-cultural environment. As a result of this scientific-based selection such early developing programs can start in which the subsequent suitability and the success of career choice can result.

The definition of the talent is not an easy task, a universally accepted definition of literature does not exist. There are different approaches, concepts which go around the interpretation of the concept well. In the spirit of the initial single-factor approaches, intelligence and creativity tests appeared in the interpretation of the talent as if they were synonymous concepts.

Balogh (2004) makes the following statement. Fluent intelligence is the ability that allows us to argue properly, deductively and inductively. Crystallized intelligence serves problem solving in daily work. Horn-Cattell's fluent, that is, fundamental components of intelligence Gömöry summarized as the following (Gömöry, 2010).

In addition to fluent reasoning, accurtural knowledge, visual processing, listening comprehension or ability of perception also appear the speed of correct decision-making, the elements of perception and memory like short-term memory, long term memory, visual and auditory sensory perception.

The further single-factor information processing model of the interpretation of the talent is identified by *Sternberg's triple model of Intelligence Structure*. *Balogh* highlights (2006) that in Sternberg's model there is a new element that is intelligent behavior is context-dependent, which means that we may behave better in such environments that are converted according to our need or we select as the best for us. In addition to the intelligence approach of the talent, creativity as a key factor also was mentioned in the researches of the 1950's. New conceptual approaches of the talent have emerged.

Later on, Sternberg who proposed the differentiation of six factors in his model draws attention to knowledge acquisition. Motivation and the inspiring environment as a confirmatory factor lead to a high level of creative thinking activities.

After a review of the single-factor theories we can conclude that in the beginning the special intelligence approaches highlighted the operations related to thinking and the characteristics of information gathering process. The studies on creativity and such an interpretation of the talent began to draw attention to the environment, motivation and behavioral elements needed for creativity. The key element and condition of the development of

the creative spirit is the environment itself, which is able to create such a condition that is suitable to handle the individual to be able to actively adapt to and participate in changes. In my opinion, the interpretation of the system of environmental conditions is growing beyond in-school, the organizational conditions and environmental system can be interpreted similarly.

The multi-factor approaches give the next approaches of the talent. The multi-factor suggests that the former approach of the talent based on a single-factor - intelligence or creativity - is not enough, we must continue to think about it on the basis of a number of criteria. Renzulli's three-circle model of the talent is one of the best-known multi-factor approaches.

Czeizel's (1997) $2 \times 4 + 1$ model might also be considered as an extension of Mönks's and the Renzulli's models. In his model the fate factor appears as a plus factor. It is the life health that is needed to live the age which means the right period for creativity for the talented individual (Gömöry, 2010).

Overviewing the models, the determining role of the social environment can be highlighted. When environmental factors act as a catalyst, the talent realizes with the interpersonal abilities of the individual.

When examining the models of the talent, we can identify cognitive operations in the background of certain conditions describing the talent. The problem is seen as a situation in which we want to achieve a certain goal, but the path to meet the goal is hidden from us.

Thinking is the process in which a new mental representation of information is created as a result of new abstraction, reasoning, problem solving.

The thinking operations are the toolbars of thinking skills which help to solve such sub-tasks that bring us closer to the permanent solution of the problems. In problem solving, as an activity in which we want to achieve a target, whose way is still uncertain at the moment, as a relating thought, in addition to the conceptual frames of creativity we are within the models fitting to it.

The measurement of cognitive operations applied during task solving occurring during teaching-learning and the process of development may make the formation of an individual cognitive operational profile possible in the longer term.

The individual identification and definition of thinking operations and thinking skills, and the managerial competences can be compared, and connections can be found between them for example, the parallel of originality as a directed thinking skill and creativity-innovation as a managerial competence. Such parallels can be set up for other professions, trade groups as well.

An analogy can be found for the various professions related to competencies, that is, certain cognitive operations, or directed thinking skills make people able to exercise some related behavioral forms and managerial skills.

Conclusion. The early identification of thinking operations and the determination of their individual patterns help to define the directions of the development of managerial competences. In my opinion, the early identification of the characteristics of cognitive operations can be achieved in the period of secondary education. The individual patterns of thinking operations allow to define personalized reflection profiles. In the case of the determination of the directed operations and areas of thinking of such a degree, new opportunities may open up for the managerial, or individual development direction in any other professions towards career orientation. The identification of thinking operations belonging to the competence areas

of different professions, and the comparison of the cognitive profile of individuals may make it possible to determine occupation choice preferences, then the associated development plans in the framework of public education.

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