

Gabriela Kelemen PhD¹

University “Aurel Vlaicu”, Arad, Romania

=====

IDENTIFICATION OF HIGHLY GIFTED CHILDREN

Abstract: We have recently witnessed an increased attention and focus of specialists on the problem area of highly gifted children, their identification, on finding the most adequate methods to develop their potentials and designing a proper legislation. This aspect is marked by the necessity to acknowledge and respect individual differences, based on human rights: gifted children need adequate educational opportunities to develop their inborn abilities. Identification and education of gifted children receives more and more attention from those responsible for their development, and we can see that the special place is given to excellence within the present educational system by developing excellence centres in several regions of the country. Implemented at the level of educational policy, the regulations well stipulated in education are worth of respect. The development of educational strategies to identify and train gifted children is an imperative in the pedagogy of highly gifted children. The text offers the outcomes of the considerations dealing with various approaches to identification of the gifted at different ate. Among other things, the conclusions point to the need to start with the identification as soon as possible and to include a number of methods.

Key words: the gifted; identification; skills; methods; education .

Introduction

Brilliant intelligence is rare and human abilities to identify it are rather limited. Most of the times we are unable to recognize it, and if we do we do not know how to approach it. We are fascinated by the brilliance of the human genius but until its recognition we have to follow a difficult path, full of obstacles. It seems to be easier to identify talents that perform in the domains such as: art, music, sport. These categories benefit from special centres, but the concerns are reduced for the rest of the gifted

¹ Gabriela Kelemen, Tel.: 0040745074150; fax: 0040257231003
E-mail address: kelygaby@yahoo.com

children, though 80% of all discoveries and scientific innovations are results of the activity of gifted and creative children.

In Romania, the interest in the domain of intellectually gifted has developed especially after 1900 when myths and prejudices regarding the superiority of the white race were put aside by research and studies in this area. The findings have revealed aspects regarding intellectual superiority in all human races, equally distributed for each gender. Of course, giftedness has its own, culture and tradition related characteristics. Unfortunately, after World War II and the political changes that occurred as its consequence, we have witnessed lower interest in the subject of giftedness, considered to be of elitist nature, promoting social inequality.

Nowadays, in Western Europe and the USA, concerns for the psycho-pedagogy of giftedness are numerous and in Romania, the interest for this domain has increased after the 90s. Since then, attempts have been made to include the category of gifted people in the object of study of special psycho-pedagogy, taking their special psychological profile into consideration. As a matter of fact, in countries such as Spain and the USA, the statement *special educational needs* explicitly includes the category of gifted children in the legislation of special integrated education.

Giftedness is a delicate and interesting subject but still insufficiently explored by the history of psycho-pedagogy, due to non-inclusion of gifted children in the category of persons with special needs for a long time. Today, it is more than obvious that these children should benefit from special training programmes, adapted to their high potential, to their psychological profile. Without these facilities they can not reach high achievements.

1. Argumentation in favour of the initiation of gifted children identification

The problems of identifying and educating the gifted bring about debates regarding the types of giftedness, the influence of different cultural groups, the origin of giftedness, the procedures of identifying it, the efficiency of training programmes. According to research, gifted children cover between 2 and 6% of the statistic population, but this percentage can rise up to 20% if inborn intelligence, supported by creativity and self-motivation, is stimulated in a social and educational environment appropriate for the development of gifted children. We support this idea, underlying that these children can reach superior performances in the

development of their own potential if they are identified soon enough and are provided with proper development conditions. According to some authors, the usefulness of research and education of the gifted can be analysed based on these three aspects: definitions, ideologies and hypothesis that allow the classification of seven problems regarding the programmes of identification and education for the gifted after their orientation:

- the level of superiority or of superior performance and the assignment of a label of gifted child;
- types of giftedness;
- the way giftedness is manifested in different cultural environments;
- the origin of giftedness;
- screening procedures of the gifted;
- the efficiency of educational programmes.

Any attempt to identify and train the gifted in a differentiated manner is improved if those involved are aware that the aspects related to ideology and empirical obviousness tend to prevail in planning and applying the programmes for the gifted or that they can focus merely on definitions. Even though all training strategies designed for the gifted children capable of superior performances (acceleration, enrichment, grouping, school activities, outside school activities) are different from the viewpoint of their components, teaching and learning time management, knowledge presentation, they also have a few common premises referring to the following:

- the intellectual nature of giftedness;
- affective characteristics of giftedness;
- objectives established by the regular curriculum;
- the ability of enriched or differentiated curriculum to fulfil the education of the gifted.

Many authors reveal in their studies the importance of early identification of gifted children in an attempt to help them understand their status, to understand that what they have is not a mistake of the nature, to make them aware that the nature of their personality has nothing weird and that they should not feel ashamed by what they are. A second argument would be the authors attempt to help them progress in their own pace in the fields they manifest giftedness, so as to achieve the performances they are capable of and to become real creators in their fields of interest. Silverman, L.K. (1983), Terman, L. M. (1981).

The research problem or the issue to be explicated according to the research refers to the considerations of the extent certain approaches, techniques and instruments contribute to adequate identification of abilities of the gifted and the possibilities of their appropriate development. The identification of the gifted will be considered according to various methods and their contribution. The starting point is that the known techniques and instruments provide a lot of information, but the complexity of the nature of giftedness imposes the need for complex approaches and variety of instruments in order to get closer to the nature of the phenomenon, often impossible to seize, thus satisfying professional ethics. Starting from the idea that a single identification method is not sufficient, we considered that a flexible system of identification should involve several approaches and ways and instruments. We have relied on a number of them:

- collecting different information in order to make a portrait of a child (like in table 2):
- classification of information in the following categories: general skills, interests, learning styles and learning success indicators (skills, preferences, learning productivity and creative skills).

Descriptive method is used along with comparative approach and descriptive statistics.

1.1. Gifted children identification according to the method of observation

Argument for choosing the method of observation. According to some specialists (Benito, Yolanda, 2003), preschool children and pupils possess certain hidden social and cognitive abilities that are rather difficult to identify. Therefore, more integrative methodologies are required to identify gifted children. There are gifted children in every type of culture, both genders and of different ages. Gifted children sometimes hide their abilities and refuse to obtain high scores in tests. The gifted can be emotionally extremely sensitive and therefore obtain low scores in tests. Complex identification methodologies are necessary and they should take into consideration various factors, including the academic, psychological and cognitive ones. There is a strong urge to find specific methods for identifying gifted children. A flexible identification system has to contain a multitude of factors. A rigorous identification is necessary but so is giving equal study opportunities to gifted children, without discrimination. Educational opportunities for gifted children should be offered equally to boys and girls.

The first stage in the identification work is searching the best valid selection procedures. Usually, the choice depends on the aimed educational programme but also on the experience of those involved professionally. A set of identification procedures contains: IQ measurement tests, tests for special abilities, teachers' appreciations, a portfolio of talents, observations, etc. All components can be examined empirically from the point of view of internal consistency, content validity, test – retest reliability and empirical validity. Research points out the invalid aspects of an identification instrument (Rotaru, T., Iluț, P.,1997). For this reason, identification procedures depend on hypothesis related to the label of “gifted”. Therefore, in problems related to identification several meanings are assigned to various definitions, ideological or empirical aspects being less taken into consideration. This approach clarifies the elements that represent a central interest in any position towards differentiated education of the gifted that are ignored or neglected.

The identification of gifted or talented children is a concern that has lately gained interest among researchers. Identification in practice can be carried out by studying some types of gifted children, different personality patterns that vary from a cognitive, ability – based and emotional point of view. The higher the giftedness is, the more emotionally asymmetric the children are, and therefore the differences are substantial. Gifted children, especially at a young age seem to possess attention and observation abilities and the level of attention and concentration evolves through the method of observation. However, identification should contain multiple procedures, various tools and methods: observations, questionnaires, lists, standard tests, meetings with parents, children and teachers, etc. Observations have to be selected according to scientific qualities, objectivity, reliability and validity, everything based on observation grids. (Radu, I., Ionescu, M., 1987). Identification requires a multi-methodological approach.

Intellectual and personality features are observable aspects by field research, direct and systematic observation, without outside interference.

We can classify the events based on aimed behaviours as follows:

- non-verbal behaviours consisting of information provided by body movements, facial expressions, gestures;
- spatial behaviours offer information about the individual's reactions to certain concrete situations, like proximity reactions, closeness between pupils;

- extralinguistic behaviours include aspects of an individual's peculiarities according to his voice modulation, tone, timbre, volume, etc.;
- linguistic behaviours refer to the content of oral or written message.

If these aspects are observed accurately, they will provide us with the information regarding certain intellectual and personality – based characteristics that will be registered according to a checklist. Observations can be carried out on groups of subjects, during a school semester. The time attributed to observation (F. C. Dane, 1990, apud, Bocoş M., 2005) will be the time assigned to formal and informal activities. Not all characteristics of gifted children are positive, there are also negative features. We have to identify these features too based on the method of observation and we can record them in our observation sheets. Observations will be classified into four components: non-verbal, spatial, extra linguistic and linguistic:

- stubbornness;
- the tendency to dispute authority;
- not taking part in class activities;
- lack of cooperation;
- cynicism;
- negligence and disorganization;
- emotional frustrations;
- absent-mindedness;
- weak interest for details.

The observed events will be systematically recorded in individual observation sheets belonging to each individual.

The evaluation of performed observations. The evaluation activity of observations can be undertaken at the end of the semester preserving critical attitude in perceiving the results, without improvising and misinterpreting the truth. The recordings will be written with a pencil, on the “field” and all observations will be written down – even those that seem less important or less interesting. They can be very useful later on when we analyse them based on work hypothesis. That is why observation grids will have two entries: secure and insecure information. Observations will be analysed with the aim of testing hypothesis and differentiating between necessary and sufficient causes.

The interpretation of evaluation will be done based on some criteria that take into account selection errors. These can be:

- Alfa errors or type I risks when we identify a child as possessing high abilities without actually possessing them;
- Beta errors or type II risks when a child is gifted but not identified as such.
- We also have to bear in mind the following aspect: Any diagnosis at ability level has a time limited predictability value (Carmen Crețu, 1998).

The evaluation of the degree of validity and reliability

a) *validity* is established if the working strategy and the tools used are useful for our expectations. There are the following types of validity:

- validity of contents (internal) – refers to the degree to which the indicators measure what is supposed to be measured;
- predictive validity (external) – has in view the degree to which the performed measurements allow the observation of relations with other measurements as well as the possibility to forecast the analysed phenomena;
- construct validity refers to the explanatory factors of a result obtained through measurement. The measure of this type of validity is carried out according to the correlation manner existing between the studied variables.

b) the *reliability* analysis has in view the trust and stability degree of the working tools. The reliability degree is established according to the extent to which we succeed in obtaining true values by undertaken measurements.

Observation, as primary method of collecting data regarding human behaviour, is the most adequate method of identifying gifted children, especially at early age. It allows collecting data in different moments of a day, the observation of child's behaviour in different activities, his interest in certain areas, everything in real-life situations. Collecting data and comparing the ones that repeat frequently can lead to certain conclusions regarding the degree of giftedness, of the area where child's abilities occur, the age level where the child is placed and the way s/he reacts from an emotional point of view. Another advantage of observation is that it can be carried out without making the observed person aware of the fact that s/he is being observed. Observations collected in this manner can be compared with other methods of identification, i.e. with data collected through teacher, parents or other family members addressed questionnaires or with questionnaires filled by the child himself.

Many authors think that natural observation is one of the most adequate methods of studying human behaviour. (Louis Cohen, Lawrence Manion and Keith Morrison, 2007)

1.2. Testing

Tests are to follow a number of regulations. First of all, standardized tests will be used that follow validity norms such as: a standard set of items applied to all children, standard application rules and evaluation procedures. Following these rules allows us to compare individual results with target group results, in our case, gifted children. The following tests have been used in our study:

- *Domino 70* Test that properly highlights the *g* factor (Spearman).

From a conceptual and correlation point of view it results a strong saturation of *g* factor, as: 0,86- *g* factor; 0,9 – *k* factor *k* (perceptive spatial variation); 0,04 - *n* factor (numeric).

- *H.P.* Test. This test is applicable for the age group of 9-25; it consists of 60 items that contain aspects related to mathematical intelligence as arithmetical argument, to linguistics and vocabulary, to logics by analogy making, to succession grasping, focus ability, differentiation between essential and consequential.

- *H.S.P.Q.* Test, according to the test manual it is applicable to the age group 12-18 and investigates 14 personality factors that are in direct relationship with success/interest for school and sport activities, leadership and school adjustment.

- *Woodworth –Mathews* Test can be used to determine the degree of school and social adaptability of the subjects as well as to determine certain differentiating aspects of their personality. This test has been standardized on a normative population of over 2000 subjects and is one of the most frequently used questionnaires of adaptation. It aims at highlighting the adaptation difficulties in different areas of human activity and grasps the differentiating aspects of a person's adaptation.

- We consider as useful the usage of socio-metrical tests and demonstrations because these respond to our selection criteria. They offer us the possibility to observe group relations, child behaviour, as well as indexes to reveal possible hetero - chronic aspects of development between intelligence and adaptation conditions.

- Another test is the *Brumbaugh & Rosho Guide to Identify Gifted Children* (1959) – that is addressed to both parents and teachers.

-*Diana Test, a creativity test*². The creativity test for preschool children consists of drawing as many figures as possible starting from a circle and a square. Each child gets a sheet of paper with several identical squares drawn on it and another sheet of paper with several equal circles.

Instructions. Preschool children are instructed to draw as many images as possible starting from the squares and circles given on those two sheets of paper. There is no time limit for this activity.

Evaluation. Children who draw the largest number of figures and images on the test sheet and those who show creativity in drawing are considered highly creative. A ranking of figures and images drawn by the children can be made in order to see which category is the most frequent:

- (1) Figures created starting from a CIRCLE:
 - Human physiognomies (F): 18 figures.(child, human, human face, the face of a human, Indian, girl)
 - Toys (J): 8 figures.(balls, balloon, robot)
 - Animals (A): 2 figures.(rabbit, bear)
 - Plants (P): 10 figures.(tree, flower, apple)
 - Means of transportation (T): 3 figures(tank, bicycle)
 - Constructions (C): 15 figures.(snowman)
 - Heavenly bodies (Cc): 7 figures.(planet, sun, globe)
 - Other objects (Ao): 5 figures.(traffic light, painting, flag, island)
- (2) Figures created starting from a SQUARE
 - Human physiognomies (F): 2 figures. (human)
 - Toys (J): 15 figures. (robot, toy)
 - Animals (A): no figures.
 - Plants (P): 6 figures. (flower, tree)
 - Means of transportation (T): no figures
 - Constructions (C): 34 figures. (house, wardrobe, chair, television, computer, dog house, window)
 - Heavenly bodies (C): 1 figure (smoke)
 - Other object (Ao): 11 figures (flag, alien, abacus, present, ice-cream, painting, cobweb, sock)

Test-based selection implies the acceptance of certain truths by the whole educational community. These refer to:

² This test is a personal contribution and was designed taking into account the characteristics of the group of children that were subjected to testing, namely children from Arad, and according to their special abilities.

- the existence of a threshold value that differentiates gifted children from non-gifted. The value can be the value of an IQ measurement test equal to 130, a maximum score in a math or foreign language test, or the child can be nominated by the teacher;
- the test or the process of selection can certainly discriminate the gifted from the non-gifted based on a valid criterion;
- the test is neither influenced nor favoured by one group or another;
- most capable pupils can be identified through this testing or selection process.

1.3. Nomination made by the parents

We consider that at early age parents or legal guardians are the first ones who get to know the development level of the children and who can notice specific aspects differentiating children. They are the first ones to observe aspects different from those manifested in the classroom. At home, children have a different behaviour, motivations are different, the interests are different, the attitude differs in a secure environment like the one at home, and therefore special abilities can easily be observed. Thus, we will rely on the data provided by parents within the identification process. These data have been collected according to interviews containing relevant questions regarding exceptional development of children in different areas such as:

- precocious reading skills;
- special linguistic abilities;
- advanced thinking;
- intellectual curiosity.

These aspects may or may not be relevant in the identification process of a gifted child, because parents have the tendency to be subjective and insufficiently realistic when comparing their child's performance with performances of other children. Therefore we have related each item – by parent or teacher – to the assessed child/pupil trying to identify the *intensity, frequency and the degree of adequacy* of the characteristics based on the identification scale.

1.4. Nomination made by the teachers

This method represents an accepted way to identify gifted children of all ages. It focuses on observing behaviour and characteristics typical for children of a certain age. The teacher observes the child in different states while being in school. The teacher uses various means of thorough

observation, such as: spontaneous observations, systematic observations recorded in checklists, the analysis and study of school results, as well as of school portfolios. Outstanding aspects observed through this method can confirm the presence of a gifted child among other children. Teacher's checklist should contain the following identification aspects:

- outstanding learning characteristics;
- strong motivation;
- leadership;
- highly creative thinking;
- eagerness for knowledge and information;
- constancy of these abilities;
- self-determination.

In order to obtain as realistic pieces of information as possible, we will use multi-factor identification items. Teachers' observations will be carried out according to these items.

A child that possesses all these characteristics is considered a gifted child and s/he should be put under a close observation.

1.5. Nominations made by classmates

In the first identification stage (*screening*) of children with high abilities, the nomination of teachers and parents, as well as classmates' self – nomination procedures are used. Nominations made by classmates are viable due to the fact that children have a developed sense of justice and honesty, therefore their observations are considered just and relevant. One of the most appreciated classmate nomination procedures is *Tracking Talents*, designed by the Canadian professor François Gagné. The questionnaire presents 42 psycho-behavioural prototypes, grouped in 9 ability categories (intellectual abilities, creative, socio-affective, physical, academic, technical skills, artistic skills, interpersonal skills, inferior achievements/success). The classmates are required to fill in the questionnaire, nominating four classmates, in order of their preferences that they consider the most appropriate for the position described by the prototype.

1.6. The analysis of school scores

The procedure of school score analysis may or may not be relevant in the attempt to identify gifted children. Specialists argue that most of the times, school scores do not fully reflect exceptional abilities of gifted children, yet it is good not to give up on these procedures, paying special

attention to use them cautiously. School scores can be analyzed as a whole or each school subject could be considered separately.

2. Presentation of results obtained during the experiment

In order to determine the characteristics of the selected sample, the descriptive statistics was undertaken. In what follows we will analyze the frequencies and the percentages of the indicators in this comparative study, which sets itself to analyze results.

2.1. Descriptive statistics

Table 1: Samples of children by level of education, chosen for identification

Samples	Components of groups-classes				Total
	A	B	C	D	
Preschool	28	22	24	26	100
Primary	26	24	27	23	100
Gimnasium	29	21	30	20	100
High school	32	25	21	22	100

Figure 1: Share at the high school level

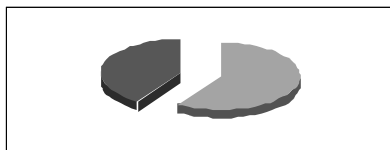
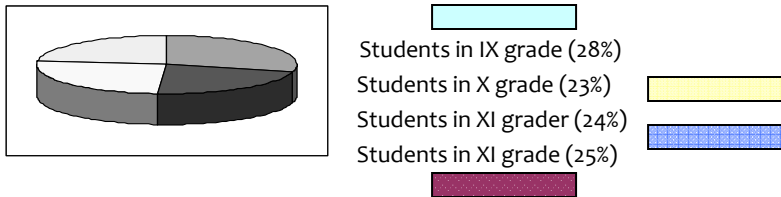
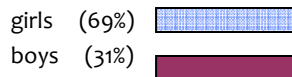


Figure 2: Share at the level of sample subject gender



In order to ground our study properly we used resources for investigation like:

- denomination made by parents;
- observation of teachers;
- standardized tests and non standardized tests;

- analysis of school results;
- students nominations;
- evaluations made according to IQ tests.

Table 2-sistemization of the informative data

Important data for evaluation of gifted children
<i>Information from parents and other family members</i> Biographic data concerning developing of a child Data of issues referring to interest showed in child activities. Personality and behaviour characteristics.
<i>Information from teachers, psychologists and others persons from school</i> Level of development. Interests and activities. Portfolio with personal works. Personality and characteristics of behaviour. Evaluation.
<i>Other data</i> IQ Tests. Scale of evaluation. Systematic observation. Individual work: compositions, drawings, control works, theses.

Starting from the idea that one method of identification is insufficient, we considered that a flexible identification system should include a variety of factors, so we relied on a number of ways and means:

- collecting different information in order to make a portrait of a child (like in table 2):
- classification of information in the following categories: general skills, interests, learning styles and learning success indicators (skills, preferences, learning productivity and creative skills).

Table 3. System of gifted children identification

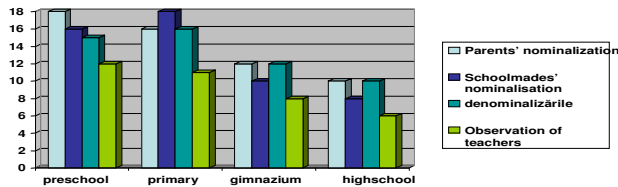
Allocation criteria	Steps	Tests
50% criteria based by non tests	1	screening Observation and nominalization by teachers; Denomination made by colleagues; Analysis of schools marks; Evaluation of individual work: compositions, drawings, control works,

theses.

Evaluation of knowledge

50% criteria based on 2 IQ tests for Rumanian population tests

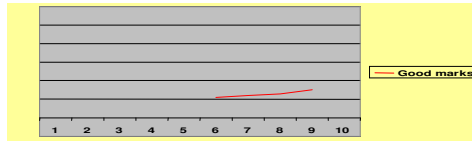
Correlation between different methods (non standardized) of identification



This diagram reveals the impact of different methods used for identification of gifted children according to non standardized tests. The significant differences are between parents' nominalization and observations made by teachers. These differences reveal subjective appreciation of instruments.

2.2. The analysis of school results

School marks



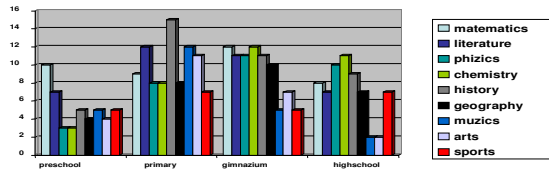
It can be seen according the diagram given above that the results of the children's learning are not equal with their IQ tests. Although their IQ scores are very high their marks are satisfactory and range between 6,5 and 9.

2.3. Results according to school disciplines

In the diagram below we can see the interest of the children for different discples, based on: check lists, observations, discussion with teachers and

children’s marks. Their interests are oriented on: Mathematics, Literature, Physics, Chemistry, Geography, History, Music, Arts, and Sports.

Identification of gifted



From the above diagram we could see the specific aptitudes of the children in different area of interest.

- scores of preschools children are relatively similar to the level of interest in different disciplines; we can see the high interest of preschool children in Mathematics and Literature.

- scores of primary school children reveal high aptitudes for: History, Literature, Arts and Music;

-scores of gymnasium children reveal aptitudes for sciences, Literature, and low interests in Arts and Sports;

-scores of high school children reveal aptitudes for sciences, Literature, and Sports and low interests in Arts and Music;

2.4. Test results

400 children have been subjected to a variety of tests: 100 preschool children and 300 students attending primary school, gymnasium and high school. The table below shows the results of the Raven Test.

level	Group/class	No. of subjects identified	Initials and sex (f = feminine, m = masculine):
Preschool	A	1	D.G. -m
	B	2	V.B. -m, C.N. -f
	C	2	I.M. -m, L.G. -m
	D	1	N.V. -f
Total		6 preschool children	
Primary	A	1	I. M. -f
	B	2	B.A. -m, C.S. -m
	C	1	D. F. -m
	D	2	U.L. -f, G.S. -m
Total		6 primary	

		children	
Gymnasium	E	2	B.M. -m, A.S. -f
	F	1	L.C. -m
	G	2	B.V. -m, T.I. -f
	H	2	I.O. -m, T.G. -m
Total		7 gymnasium students	
High school	I	2	I.U. -f, F.H. -m
	J	1	A.S. -m
	K	2	P.O. -m, F.G. -m
	L	2	S.D. -m, U.I. -f
Total		7 high school students	
Total		26 gifted children	

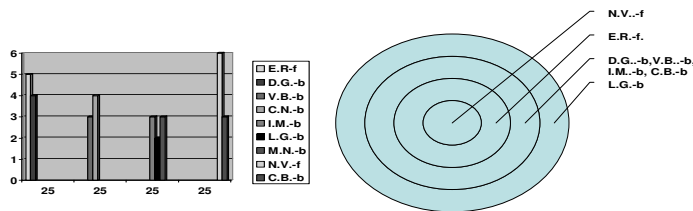
According to the test 26 gifted children of different age and different sex have been identified:

- at preschool level 6 gifted children are identified according to the sample of 100 children, 2 girls and 4 boys;
- at primary level 6 gifted children are identified according to the sample of 100 children, 4 girls and 2 boys;
- at gymnasium level 7 gifted children are identified according to the sample of 100 children, 5 girls and 2 boys;
- at high school level 7 gifted children are identified according to the sample of 100 children, 5 girls and 2 boys;

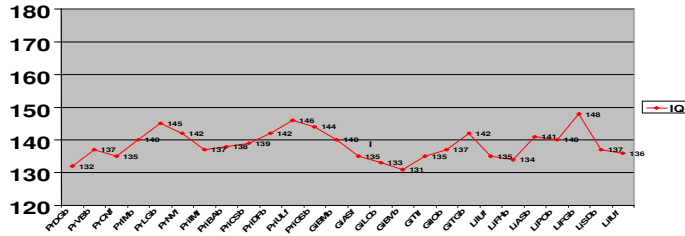
1.4.7.- Woodworth –Mathews Test is a psychometric test, according to which we wanted to determine the degree of academic and social adaptation of children.

In the diagram underneath we can see the preferences of children concerning interrelationships.

Sociogramă-preferințele copiilor de interacțiune cu supradotații



Level of IQ test



In accordance with the data from the diagram above the children and students identified as gifted have an IQ between 132,5 and 146,5.

From the point of view of the school level of the subjects, we can say that the pair samples preserve the identical proportions of 25% of pre-school, primary, secondary, high school students.

Table 4. Sex of children identified as gifted

GROUP	Sex	Frequency	Percentage	Cumulative percentage
experimental	Male	8	66.7	66.7
	Female	4	33.3	100.0
	Total	12	100.0	

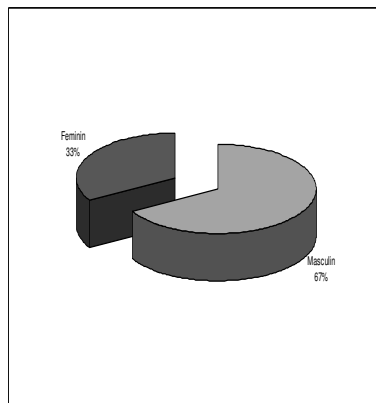


Figure 2 – Sex of children identified as gifted

Conclusions

We consider that in the attempt to identify gifted children, the most efficient procedures are the ones mentioned above: observations, nominations made by parents and teachers, IQ evaluation through tests and standardized/ non-standardized methods, analysis of school results, nominations and denominations made by pupils.

In the identification process of gifted children it seems appropriate to focus especially on those indicators that allow us to make a multifactor identification, as reliably as possible. Therefore, we consider that combination of different procedures and techniques, namely using a wide variety of items, we will succeed to achieve our goals.

It is necessary to use a target group consisting of enough members, for the sample to be representative for the identification of gifted children.

The results of the application of identification strategies must reveal objective and clear information on the following dimensions:

- the distribution of scores in the H.P. intelligence test
- the results of applying the *Raven Tests*- intelligence test
- the results of applying the creativity test.
- Bravais-Pearson and Spearman correlations between the intelligence tests.
- the results of applying the socio-metric test.
- the distribution on standard grades of QI_2 factor in pupils with medium QI , gifted children.
- results obtained according to non-tests.

All results are necessary if we want to identify gifted children in order to train them properly. This educational intervention should start at early age, so as not to waste the inborn potential of the gifted. The sooner the interventions start, the more satisfactory the results in the evolution of gifted children will be. It is a matter of moral conscience to interfere using the best methods in the identification and education of gifted children.

Bibliography:

- Adele Faber, Elaine Mazlish, (2002), *Comunicarea eficientă cu copiii - acasă și la școală*, Editura: Curtea Veche.
- Addison, L., (1983), *Selection and training of teachers of the gifted in the United States* in Gifted Education International, nr. 1 (2)

- Alonso, J.A. (1995b), *A Differentiated Program: Significant Curriculum Adaptations*, 11th World Conference on Gifted and Talented Children, World Council, University of Hong Kong.
- Azzopardi, Gilles, (2004), *Dezvoltați-vă inteligența*, Editura Teora, București.
- Borland, J., H., (1990), *A note on existence of certain divergent-production abilities*. În: *Journal for the Education of the Gifted*, 9, 239-251.
- Bernand, J., (1988), *The inferiority curriculum*, in *Psychology of Women Quarterly*, nr.12.
- Benito, Y., (1993c), *Learning Potential Evaluation in Gifted Children* (Poster), 10th World Conference on Gifted and Talented Education, World Council, University of Toronto.
- Benito, Y., (1993d), *Relation among Intelligence, Creativity and Personality in Gifted Children*, 10th World Conference on Gifted and Talented Education, World Council, University of Toronto.
- Benito, Y., (1995a), *Gifted Children's Induction of Strategies: Metacognitive and Cognitive Strategies to Solve Maths and Conversion Problems*, 11th World Conference on Gifted and Talented Children, World Council, University of Hong Kong.
- Benito, Y., (1995b), *The Gifted Adolescent and Faculty of Reality Perception in This Adaptation to Everyday Activity*, 11th World Conference on Gifted and Talented Children, World Council, University of Hong Kong.
- Braggett, E., J. *A developmental concept of giftedness: implications for the regular classroom*. În: *Gifted Education International*, Vol. 12, 64-71.1997.
- Carter, Philip, (2005), *Teste de inteligență și psihometrice*, Editura: Meteor Press.
- Csikszentmihalyi, M.; Csikszentmihalyi, I.S., (1993), *Family influences on the development of giftedness*, in Bock, G.R.; Ackrill, K., *The Origins and Development of High Ability*, Wiley, Chichester.
- Chiang, G.G.T., (1992), *Effects of psychological type preferences of gifted adolescents and teachers of the gifted on student feedback*, in Wu, W.T.; Kuo, C.C.; Steeves, J., *Proceedings of the Second Asian Conference on Giftedness*, National Taiwan Normal University, Taipei.
- Denise de Castilla, (2004), *Testul arborelui - relațiile interumane și alte probleme ale lumii contemporane (ediția a II-a)*, Polirom, București.
- Deschamps, G., (1990), *Un Proiect educativ pour les enfants surdoués*. Nimes, MENSA-France.
- François Gagné, (1999), *Tracking Talents: Identifying Multiple Talents Through Peer, Teacher, and Self-Nomination*, Waco, TX: Prufrock Press.
- Gold, M. J., (1965), *Education of the Intellectually Gifted*. Ohio, Merrill Books.
- Goldstein, D., & Wagner, H., (1993), *After school programs, competition, school Olympics and summer programs*. In: Heller, K.A.; Monks, F. J. and Passow, A.H. (ed. by): *International Handbook of Research and Development of Giftedness and Talent*. New York: Pergamon Press Inc.593-604.

- Hany, E.A., (1994), *The development of basic cognitive components of technical creativity: a longitudinal comparison of children and youth with high and average intelligence*, in Subotnik, R.F.; Arnold, K.D., *Beyond Terman: Contemporary Longitudinal Studies of Giftedness and Talent*, Ablex, Norwood, New Jersey.
- Johnsen, S. K. (Ed.)(2004). *Identifying gifted students: A practical guide*. Waco, TX: Prufrock Press.
- Kelemen; G. (2008), *Pedagogia supradotării. Identificarea și educarea copiilor supradotați*, Editura Universității Aurel Vlaicu, Arad.
- Robinson; K. (2011), *Out of Our Minds: Learning to be Creative*, Edited by Capstone Publishing Ltd., USA.
- Mönks, F.J.; Spiel, C., (1994), *Development of giftedness in a life-span perspective*, in Heller, K.A.; Hany, E.A., *Competence and Responsibility*, Hogrefe – Huber Publ., Toronto.
- Renzulli, J.S.; Reis, S.M., (1985), *The Schoolwide Enrichment Model: A Comprehensive Plan for Educational Excellence*, Creative Learning Press, Mansfield Center, Connecticut.

Biographical note

Dr Gabriela V. Kelemen obtained a PhD in the field of educational sciences in 2008. Since 2006 she has worked at the University Aurel Vlaicu in Arad (Romania) where she has become a senior lecturer. She is an author of a number of books, reviews and papers in scientific and professional journals, especially in the field of preschool education and upbringing. She is an editor of the journal *Educatia – Plus* published by the University of Aurel Vlaicu in Arad. She has been a manager and a coordinator of several projects (ANTRES project financed by EU between 2009 and 2011). She was decorated with the Order of Merit by the President of Romania Ion Iliescu in 2004.