STIMULATION OF CREATIVITY AS A PREREQUISITE OF PERMANENT SUSTAINABILITY FOR PERSONALITY DEVELOPMENT OF GIFTED LEARNERS

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Abstract: The study focuses on the presentation of the results of the verification of educational processes aimed at development of creativity among gifted learners. This creativity development among gifted learners is perceived as a prerequisite for permanent sustainability of systems for complex growth of learners. Strategies that are verified in the study focus on development of divergent thinking, creative problem solving, figural fluency, flexibility and originality among academically talented learners and they are also part of a complex programme called Sophia which is designed for gifted learners and taught in programmes with enriched and expanded educational content. The key source of the programme was Model ALM - Autonomous Learner Model designed by G. Betts and J. Kercher (1999) and is suitable for ISCED 2 and 3. The results of the verification showed the positive effect of the Sophia Programme on monitored creativity parameters.

Keywords: Giftedness, Level of Divergent Thinking, Creative Problem Solving, Figural Fluency, Flexibility and Originality, Autonomous Learner Model (ALM).

1 Introduction

Systematic education of a human being and other influences of external social understanding, support, acceptance, possibly oppression, reduced tolerance and disrespect gradually stimulate the internal environment that participates in generating human authenticity. This can have both positive and negative influences.

Errors in recognizing authenticity and the desire for sameness, the uniformity on one hand or the effort of parents to achieve success and prestige through their skilled children that they themselves did not achieve promptly lead to social problems, emotional problems, mental imbalance, desperation of a gifted child. (for more see Mudrak 2015). The policy of "adaptation" also contributes to similar problems. It causes irreparable and unjustified injustice towards individuals and groups. The label "gifted" cannot be categorized by society (although it happens so often) only as cognitive abilities and to define needs of gifted children that are primarily related to thinking regardless of feelings, survival, attitudes. Cognitive skills are an integral part of a personality as a whole; therefore, we believe that educational models for talented people that have the potential for permanent sustainability must be inevitably oriented toward the complex development of the personality of a gifted child. Leading theorists (Taylor 1992, Betts 2003) consider this dimension as irreplaceable in the formation of authentic identity and formation of values of a human being; furthermore, they argue that the perception of differences in human personalities has a moral meaning in that the perception of one's own distinction in the context of capabilities and performance has for the life and future of the gifted person extremely important moral and human breadth and depth. In this context we have developed an educational programme for academically gifted learners at an eight-year grammar school using "SOPHIA" which follows the stated intention, to develop the complex personality of a gifted learner and to facilitate his/her authenticity and autonomy. In its structure and philosophy the Sophia programme establishes/follows the Autonomous Learner Model (Bettsa & Kercher 1999), which we analyze in the theoretical background of the study.

2 Theoretical Background of the Solved Problem

Giftedness is considered to be a very complex phenomenon whose multiple factors are caused by a variety of determinants that affect the process of its formation and the quality and quantity of its manifestations as an integral whole. Giftedness and its genesis could also be seen in the context of the history of human society (for more see Dočkal, 2012) and although Slovakia does not belong to one of the largest countries within Europe we can consider the system around gifted people in the segregated, integrated as well as in a compromised variant as relatively well developed. Legislative measures and the inclusion of gifted learners into the group of learners with special educational needs also contribute to this situation. A gifted learner as an exceptional individual has many specific educational needs which are highly individualized due to his/her personality. The individual characteristics of gifted learners and their specific educational needs are elaborated in the works of following authors: B. Clark (1992), F. J. Mönks (1993), J. J. Gallagher& S.A. Gallagher (1994), J. VanTassel–Baska (2000), E. Winner (1996), R. Manstetten (1995), V. Dočkal (2005), J. Laznibatová (2012), J. Duchovičová (2007), V. Dočkal, J. Duchovičová, (2017), J. Jurášková (2006), Portešová, S. (2011), L. Silverman (1993) and others.

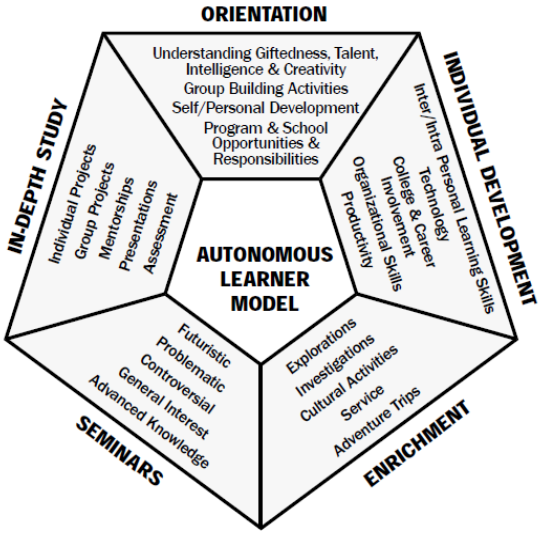
Giftedness is necessarily seen as personal capital and internal potential but in the societal view also as social capital, as a production tool, something in which to invest (Smékal 2012). This awareness develops very slowly while the usual attitude is to consider the support of giftedness as useless elitism.

The eight-year grammar schools could be considered as a kind of external differentiation of learners as there is an option to choose a more demanding type of school than the second level of elementary school. A detailed view of the education of gifted learners is elaborated by K. A. Heller (2002). A relatively early selection of learners is a controversial issue and subject to the OECD disputation. The lack of research and studies that would address this type of school in terms of monitoring and education of academically talented learners suggests that our research field has been minimally analyzed to date. The accepted view of the eight-year grammar schools is that whoever enrols in this type of school is considered to be an over average prosperous and successful learner in terms of achieved learning outcomes. He/she presents with excellent results and high performance which stems from the high level of internal motivation in a subject. By combining these characteristics a learner excels in one or more school subjects as compared to his/her peers. To repeat – our goal is to verify the educational project regarding academically talented learners at eight-year grammar schools. The intention of this project is also to contribute to the development of academically gifted learners in the field of creativity and positive self-evaluation. We have drawn from the multidimensional models of talents based on the characteristics of the structure of a talent which is determined both by internal (biological and psychological) and external – environmental elements (Duchovičová, J., Šabo, A., Babulicová, Z., 2009). In these models IQ is not the only critical criterion but the intersection of multiple components namely: intelligence, creativity, motivation, non-intellectual factors such as personality (enthusiasm, personality strength, willingness to sacrifice short-term satisfaction to meet long-term goals), emotionality, self-concept and psychomotor area, sensory area, imagination, family, school, peer groups, critical events, happiness factor, opportunity (random events that trigger changes in the direction of an individual).

A key resource for structuring the proposed model by us was the ALM model for an autonomous learner appropriate for ISCED 2 and 3. It is an educational model specifically developed for gifted learners. It starts from the term autonomous learner – a learner who solves problems by combining divergent and convergent thinking with minimal external leadership in selected areas of his or her studies.

According to ALM the principles of optimizing the abilities of gifted learners should include objectives aimed at: support of

self-image and self-assessment; understanding of one's own abilities in the context of society; development of effective interpersonal relationships; support to explore diverse areas; development of critical and creative thinking; support of decision making and problem solving; integration of activities that ease the emotional, social and physical development of a learner; development of individual areas of interest; development of responsibility for one's own learning and performance not only at school but primarily in life (Life-long Learners).



Picture 1: Autonomous Learner Model (1996 by Betts & Kercher)

ALM puts emphasis on the area of cognition, emotional development, social development and physical development. It develops five superior dimensions as given below.

1st dimension: Orientation - it is crucial for an autonomous learner to understand the gist of his/her abilities, to be able to work in a group and to develop cooperative competences, to focus on further education and a profession to prepare for lifelong learning and to understand everything necessary for the development of one's own individuality. It includes 4 areas:

- *Understanding the essence of a talent, intelligence, creativity (by learners, teachers and parents)* – it is realized by the method of studying and analyzing of biographies of important personalities in history and their mutual introduction (the method is called "Night of the Notables").
- *Creation of active groups* - focuses learners on acquisition of group roles, group strategies and effective group activity.
- *Individual/personal development* – orientates learners in understanding of themselves, their own being, leads to self-respect and self-understanding, understanding of their abilities, strengths and weaknesses and the possibilities for their improvement.
- *The programme and the school, the possibilities and the duties* – it orientates learners in principles and in the essence of the model itself. It is based on a discussion so that students understand the direction and procedure of lifelong learning. It leads toward the improvement of mutual interaction of teacher and learner and their equal roles, to the involvement of the learner in the school community and to the creation of his/her own educational plan.

2nd dimension: Individual development – was designed to develop individual concepts, attitudes and discovering the possibilities of self-realization. It contains six areas:

- *Inter/intra personal development* – extends individual personal development.
- *Learning Skills* – focuses on the development of critical thinking, cognitive processes, creative thinking and problem solving.
- *Technologies* – focus on development of competencies to work with different technologies and their use in learning.
- *Further education and career* – involves learner's (student's) orientation in the choice of a study programme at the next level of education, choice of specific activities, finding options of work in the field of education. This is career planning and engagement in the field of interest.
- *Organizational skills* – learners learn various organizational methods and strive for personal life management (Life-Management).
- *Productivity* – relates to the mastery of personal potential for the creation of diverse products (Producers of Knowledge).

3rd dimension: Enrichment – to enrich the content and to plan one's own differentiation in content, process and product. It includes the writing of one's own study plan and it is the essence of autonomous learning. It contains 5 specific areas:

- *Research* – means short-term or ongoing investigations in different areas. Parents, grandparents, a home library and others may be of help.
- *Survey* – has a wider dimension than exploration and leads to acquisition of an in-depth analysis of problems. Students are led to independent planning and organizing of their own research.
- *Cultural activities* – an area developed to allow students to experience overlapping situations (learning in the museum, by playing games, reading poetry, etc.)
- *Service* – teaches learners to understand themselves and their relationships with the environment in a human context. The service includes various humanitarian activities in which to participate.
- *Adventurous Travelling* – includes three stages: road planning, participation and evaluation.

4th dimension: Seminars – contains topics that are interesting and attractive for students, focused on the development of critical and thoughtful thinking. Learners have the opportunity to demonstrate their skills, knowledge together in small groups. These focus on *futuristic themes, problem areas and problem teaching, controversial themes, progressive knowledge and the main interests of learners.* The two hour per day seminar is prepared by learners together with teachers for two weeks. Examples of topics: cognition of other cultures, parapsychology, mental disorders, women in history, conspiracies and theory, creativity, prosecution and trial process, etc.

5th dimension: Deepening study. As part of deepening study, learners process the following:

- *Individual or group projects* (maximum number of members in the group is 3). They can use *mentoring* – consultations with experts in a particular project area. If they have a problem to find a suitable counsellor, older students can mentor projects of younger ones. Short-term projects and in-depth analyses of problems *are presented* to the audience during the study and at the end of the study each student presents a two-year project.
- *Assessment* – students are led to objective self-assessment and evaluation of other projects, both the creative process and its final product.

Within the applied model we have prepared learners for a higher level of education and achievement at the high educational level intended for gifted learners. The significance is attributed to the model especially in the context of a learner's preparation for life, accepting oneself and his/her difference, seeking truth, friendship and the joy of seeking the unknown. Autonomous learner is in accordance to the model seen as:

- a learner developed in the area of attitudes and emotionality (self-confidence, self-acceptance, enthusiasm, acceptance by others, supported one, willingness to know and learn,

anticipating failure, having internal motivation, accepts others and looks for personal satisfaction).
- a learner developed in the area of *behaviour* (adequate social skills, independence, setting short-term and long-term goals, does not seek the consent of others, thinks creatively and critically pays increased attention to his/her interests, does not tolerate condemnation, flexible and persistent, produces knowledge, understands himself/herself – has own motives and accepts own personality).
- a learner with developed sociability that is assessed as successful in various areas, with anticipated success in the future, has positive relationships with classmates and has a positive impact on them, parents see him/her as a competent and responsible individual, accepted by adults and admired for his/her skills.

3 Research Problem

The aim of the research was to find possibilities and perspectives for the development of academic talent at eight-year grammar schools through the projection and application of an educational programme for academically talented learners based on the above analyzed Model of the Autonomous Learner (ALM). This was modified (Sophia Project) according to the school curriculum of the chosen eight-year grammar school. The main subject of the research was to verify the possibilities and perspectives of the development of academic talent at the eight-year grammar schools where we actually considered the development of an adequate upbringing and education programme for these learners as a starting point. We believe that one of the conditions for securing the complex development of the personality of these academically gifted learners is the projection and implementation of upbringing and an educational programme that respects the specific educational needs of the gifted. Within the stated aim we designed the SOPHIA Programme and verified its effectiveness on selected personality characteristics *(the areas of self-perception, creativity and social status)* of academically talented learners. In this study we present the results identifying the impact of the Sophia Programme on the level of the gifted learners' creativity.

Research problem: The impact of the projected and implemented programme of upbringing of academically talented learners "SOPHIA" on the level of pupils' creativity?
The research problem solves the causal relationships of the operational variables which are: the level of divergent thinking, the creative solution of problems, the level of fluency, originality and flexibility in the area of figural creativity.
Hypothesis. In our process of programme verification we assumed that the *Project of upbringing and education of academically gifted learners at eight-year grammar schools has a positive impact on the level of learners' creativity.*
In regard to the operationalized constructs of the concept of creativity we have decided in the design of the research to verify the following partial hypotheses:

H1 We assume that the applied Sophia Programme has a positive influence on the level of divergent thinking of learners.
H2 We assume that the applied Sophia Programme has a positive influence on the level of creative solution of learners' problems.
H3 We assume that the applied Sophia Programme has a positive influence on the level of figural fluency of learners.
H4 We assume that the applied Sophia Programme has a positive influence on the level of figural originality of learners.
H5 We assume that the applied Sophia Programme has a positive influence on learners' figural flexibility.

Sample Selection: We conducted the research probe at an eight-year grammar school in the region of Banska Bystrica. The selection of this grammar school affected the fulfilment of the condition that the grammar school does not provide segregated or integrated education of generally intellectually talented learners (nor did it happen in the past). The second condition was a reasonable material choice and realistic time frame for implementation of the experimental project. Within the project we worked with class *3 o. g. (13-14 years).* A sample selection was available. From the basic research sample of 27 learners, 11 academically gifted research subjects were discovered in the programme through the learners' autonomous questionnaires and nominee questionnaires completed by teachers.

Research Methods: To obtain the research data we used the *quasi-experiment*. This kind of experimental verification was chosen due to the absent option to ensure random selection of the research subjects (since the individual learners were purposely selected/identified) and due to the absence of a control group. Through the quasi-experiment (to be called simply "experiment" from this poin onward), we verified the elaborated project of education and upbringing of academically gifted learners at eight-year grammar schools. The project was oriented towards the development of the following areas as they related to the learner's talent:

- creativity - a battery of different tasks and activities aimed at facilitating creativity,
- self-perception - using activities, worksheets and subsequent discussions on various topics,
- social status - through interviews with gifted learners, exploring relationships within the group, using pair and group work.

In the pre-test and post-test of the experimental group in relation to the identification of the defined constructs of constructive thinking we used the following *Test Methods:* test for creative solution of problems, test for divergent thinking, test for figural creativity and the test for creative personality. The time period for conducting the research probe lasted approximately 6 to 7 months. Responsible consideration of all factors led us to the decision to project and plan a SOPHIA Programme on four basic dimensions of the Autonomous Learner Model: *1. orientation dimension, 2. individual development dimension, 3. enrichment dimension, 4. seminars dimension.* A detailed description of the Sophia Programme's activities can be found in the publication by A. Sabo (2011). Statistical analysis was processed in the WinStat programme through a Student Pair Test (t-test for correlated files) groups of subjects of academically gifted learners (pre-test and post-test) and the Pearson Correlation Analysis (simple Pearson's correlation) through which we examined the correlations of the experimental group data outcomes of the post-test and pre-test.

4 Research Results

The impact of the verified Sophia Programme on the creativity of academically gifted learners has been evaluated using these factors: *level of divergent thinking, creative solution of problems, fluency level, originality and flexibility in the area of figural creativity.* The measured score in relevant tests has testified to the qualitative changes in the creativity of the subjects in the respective area, these changes in the test have obtained a quantity character. We statistically processed the data gathered from the figural creativity test, the divergent thinking test, the creative problem solving test, and the creative personality test in the pre-test and post-test of the experiment. We assumed that the *project of upbringing and education of academically talented learners at eight-year grammar schools has a positive impact on the level of learners' creativity. We proceeded from the assumption that in the post-test results of the surveyed group it would be possible to follow a significant (at the level of 5%) positive shift in creativity compared to the pre-test results of this group.*

Therefore, we have verified the individual partial hypotheses H1 to H5 in order to confirm the complex main hypothesis.

The partial H1 hypothesis
Here we assumed that the applied Sophia Programme has a positive influence on the level of divergent thinking of learners; thus, there will be a significant difference between the results of the pre-test and the post-test of the group of examined learners in the area of divergent thinking.

Table 1 T-test of Results of the Divergent Thinking Test

Variables:	Pre-test Post-test		
	N	**Mean Difference**	**Standard Deviation**
	11	-0,136363636	0,067419986
	T	**Degree of Freedom**	**P**
	-6,70820393	10	5,31018E-05

As from applied statistical methods it can be claimed that the partial hypothesis H1 has been confirmed. It is true then that Sophia Programme has a positive impact on the level of divergent thinking of learners and by its application can be facilitated to provide the development of divergent thinking of gifted learners.

Table 2 Correlation Analysis of Divergent Thinking Test

Pre-test	**Pre-test**	**Post-test**
Correlation Coefficient	1	0,804469
	11	11
One-way Significance	0	0,001415
Post-test		
Correlation Coefficient	0,804469	1
	11	11
One-way Significance	0,001415	0
Cronbach's Alpha	0,886878	

Partial Hypothesis H2

In this hypothesis we assumed that the applied Sophia Programme had a positive impact on the level of creative solving of learners' problems, meaning that there would be a significant difference between the results of the pre-test and the post-test of the group of surveyed learners in the area of creative problem solving.

Table 3 T-test of Results of the Creative Solution of Problems

Variables:	Pre-test Post-test		
	N	**Mean Difference**	**Standard Deviation**
	11	-0,236363636	0,102691064
	T	**Degree of Freedom**	**P**
	-7,63386285	10	1,77059E-05

Table 4 Correlation Analysis of Test for Creative Solution of Problems

Pre-test	**Pre-test**	**Post-test**
Correlation Coefficient	1	0,773895
	11	11
One-way Significance	0	0,002594
Post-test		
Correlation Coefficient	0,773895	1
	11	11
One-way Significance	0,002594	0
Cronbach's Alpha	0,868182	

Based on t-test and correlation analysis results it can be claimed that partial hypothesis H2 has been confirmed. It is true that the Sophia Programme has a positive impact on the level of creative solving of learners' problems and by its application can be facilitated the ability of gifted learners to creatively solve problems.

Partial Hypothesis H3

We assumed that the applied Sophia Programme has a positive effect on the learners' figural fluency, meaning that there would be a significant difference between the results of the pre-test and the post-test of the learners in the field of figural fluency.

Table 5 T-test of Results of the Figural Creativity Test -Fluency

Variables:	Pre-test Post-test		
	N	**Mean Difference**	**Standard Deviation**
	11	-0,2636364	0,191168655
	T	**Degree of Freedom**	**P**
	-4,57388216	10	0,00102016

Based on t-test and correlation analysis results it can be claimed that the partial hypothesis H3 has been confirmed. It is true that the Sophia Programme has a positive impact on learners' figural fluency levels. Its application at the eight-year grammar schools can foster the fluency in figural creativity for gifted learners.

Table 6 Correlation Analysis of Test for Figural Creativity – Fluency

Pre-test	**Pre-test**	**Post-test**
Correlation Coefficient	1	0,962080762
	11	11
One-way Significance	0	1,11559E-06
Post-test		
Correlation Coefficient	0,962080762	1
	11	11
One-way Significance	1,11559E-06	0
Cronbach's Alpha	0,979781723	

Partial Hypothesis H4

In connection to this hypothesis we assumed that the applied Sophia Programme had a positive effect on the level of figural originality of the learners and that the difference between the results of the pre-test and the post-test of the surveyed group of learners in the area of figurative creativity originality would be significant.

Table 7 T-test of Results of the Figural Creativity Test - Originality

Variables:	Pre-test Post-test		
		Mean Difference	**Standard Deviation**
	11	-0,178181818	0,116517654
	T	**Degree of Freedom**	**P**
	-5,0718687	10	0,000483504

Table 8 Correlation Analysis of Test for Figural Creativity – Originality

Pre-test	**Pre-test**	**Post-test**
Correlation Coefficient	1	0,802565625
	11	11
One-way Significance	0	0,001473261
Post-test		
Correlation Coefficient	0,802565625	1
	11	11
One-way Significance	0,001473261	0
Cronbach's Alpha	0,855673889	

Based on the t-test and the correlation analysis results it could be claimed that the partial hypothesis H4 has been confirmed, therefore, the Sophia programme has a positive impact on the level of figural originality of learners and its application at eight-year grammar schools can support originality in the field of figural creativity among gifted learners.

Partial Hypothesis H5

We assumed that the applied Sophia Programme has a positive impact on learners' figural flexibility and that the difference between the pre-test and post-test results of the group of surveyed learners in the field of figural creativity flexibility would be significant.

Table 9 T-test Results of the Figural Creativity Test - Flexibility

Variables:	Pre-test Post-test		
	N	**Mean Difference**	**Standard Deviation**
	11	-0,09181818	0,068675786
	T	**Degree of Freedom**	**P**
	-4,434262409	10	0,001265717

Table 10 Correlation Analysis of Test for Figural Creativity – Flexibility

Pre-test	**Pre-test**	**Post-test**
Correlation Coefficient	1	0,859149758
	11	11
One-way Significance	0	0,000351422
Post-test		
Correlation Coefficient	0,859149758	1
	11	11
One-way Significance	0,000351422	0
Cronbach's Alpha	0,91310465	

Judging from t-test and the correlation analysis results it can be claimed that the partial hypothesis H5 has been confirmed. It is true that the Sophia programme has a positive impact on learners' figural flexibility, thus by applying an experimental project concerning the education of academically talented learners at eight-year grammar schools it is possible to support flexibility in the field of figural creativity of gifted learners.

We used the Creative Personality Test as a supplementary method. It focused on diagnosing the personality of subjects in relation to the potential of creative production. Gathered results indicate a high level of significance at 1%.

Table 11T-test of Results of Creative Personality Test

Variables:	Pre-test Post-test		
	N	**Mean Difference**	**Standard Deviation**
	11	-0,552727273	0,240544836
	T	**Degree of Freedom**	**P**
	-7,62099	10	1,79665E-05

From the t-test and the correlation analysis results we found out that the application of the Sophia Programme in the education of academically gifted learners at eight-year grammar schools can support the development of the personality of academically gifted learners in the area of creative production.

Table 12 Correlation Analysis of Creative Personality Test

	Pre-test	**Post-test**
Pre-test		
Correlation Coefficient	1	0,919411
	11	11
One-way Significance	0	3,12E-05
Post-test		
Correlation Coefficient	0,919411	1
	11	11
One-way Significance	3,12E-05	0
Cronbach's Alpha	0,947835	

In conclusion it can be stated that the hypothesis regarding the positive change in the field of creativity of the subjects of the experimental group due to the influence of the Sophia programme was confirmed through all partial hypotheses.

5 Conclusions and Discussion

The statistical analysis of the pre-test and post-test results of the group of academically gifted learners who were involved in the quasi-experiment clearly proves that all partial hypotheses were confirmed, therefore, we allow ourselves to state that the SOPHIA Project can be primarily applied in didactic work with academically talented learners at eight-year grammar schools. The project in line with the research assumptions facilitates positive changes in the field of creativity for academically talented learners and that in all studied areas included: level of divergent thinking, creative solution of problems, level of fluency, originality and flexibility in figural creativity area. We assume that the suitability in the choice of this project is gaining importance in connection to the development of gifted learners who are otherwise marginalized in groups, possibly classes and thus it contributes to the sustainability of the programme in the education of gifted learners.

On the basis of the results we recommend that teachers as well as parents of talented learners pay attention to all of the elements of a gifted personality. Facilitating activities should encompass the dimension of orientation which includes understanding the essence of a talent, intelligence and creativity, the support of learners' ability to collaborate effectively in a group through group strategies, roles in the group and processes within, the focus on gifted learners and their own concepts, self-confidence, understanding of self-excellence, one's own talent as well as weaknesses, options to develop and use one's own talents after studies. Understanding of one's own self leads gifted learners to better develop their abilities and potential. Within this dimension we recommend finding ways to involve talented people in the life of the school and the society in which they live with a subsequent evaluation by teachers and the school community. The creation of opportunities and activities for a thorough understanding of the programme and its goals as a starting point for acquisition of strategies of lifelong education and learning. Scrupulously make the parents, teachers, leaders and learners themselves aware of the phenomenon of a talent, its nature and the possibilities for its development. To broaden the concept of one's self, self-confidence, self-respect and ability to work effectively with others through activities and communication with talented people. (in addition to the lectures we used "The Official Logo of Gifted Students Group", Activity "I Am ..." Worksheet of multiple intelligence, Profiling sheet of multiple intelligence, Self Profile creation activity, discussion and essay writing for questions: What do you perceive when you hear the term intelligence? How does an intelligent person manifest? Do you think intelligence is the same as wisdom? Who do you think is intelligent? Search for information within different sources about the relationship between intelligence and personality.

We also recommend facilitating individual development and learning abilities especially through the inclusion of learning taxonomies (Anderson & Krathwohl 2001) for the development

of cognitive processes and different types of thinking. Place emphasis on the implementation of creative and critical thinking strategies and problem solving learning, the use of technology in learning and gathering the information (planning of future steps in relation to further studies or career after the end of studies, the development of organizational skills by incorporating methods of organizing the day, week, month, year, supporting productivity for example by creating projects, classroom or school magazines etc.) The dimension of the model is primarily devoted to furthering the personality development of a learner; therefore, we recommend the inclusion of an activity for the development of self-knowing, self-confidence and construction of a positive self-image. The dimension of the model is primarily devoted to further personality development of the learner, so we recommend the inclusion of activity for the development of self-knowing, self-confidence, construction of a positive self image.
For the enrichment dimension we recommend short- and long-term research (For example: what are the three most favourite books of a librarian in the library? Read them), inquiry with the provision of entrance instructions, the inclusion of cultural activities such as visits to museum, theatres, excursions and other events organized by learners as well as the involvement of learners in various services for society e.g. collecting garbage in the park, collecting food or clothing for the poor, spending time in a retirement home, and similar activities. This activity enables the learner to understand himself/herself and others in the context of society as well as learn about humanism and its impact on society. This enrichment can also include adventure travel: activities should include finding answers to questions such as: Why travel there? How to get there? What do we want to learn there? How much money do we need? The dimension of enrichment is not only reduced to enriching the curriculum for gifted learners but also to enrich the emotional and social component of personality, activities developing aesthetic feeling, creative approach and cultural identity.

Within the next dimension we recommend planning and organizing seminars on topics based on learners' interests, including futuristic, problematic, controversial themes related to the general interests of the group and knowledge. Seminars are designed for gifted learners to demonstrate their ability to learn and work in a group. The dimension of seminars ensures not only the development of the area of interest of the learner but also offers possibilities for confrontation with other learners, possibilities for argumentation, logical reasoning etc. It also includes the development of the organization of time and place of the seminar. This dimension plays an important role in the process of transformation of learners into autonomous learners, gaining feedback in relation to one's own strengths and weaknesses, elements of peer learning and peer presentation evaluation appear. In the context of deepening the study we recommend the implementation of individual and group projects, to motivate learners to work with a mentor and create space for presenting the results of their own projects related to the evaluation and self-evaluation of their own autonomy. (Responding to the main project question: Am I autonomous? Was I able to plan, participate, complete and evaluate the project? Assessment of the learning process and the product are integral components of learning through an autonomous learner model. From the evaluation of the Sophia Programme by the learners included in the project we selected the following comments: "It's good, I've learnt a lot about things I did not know about." Message for the author of the project: "A good idea, it will help many people to find out more about themselves". The project helped me "to find out what I did not know about myself".

Personal experience of implementing the programme leads us to the conclusion that the fundamental principle of designing every modern project of education and teaching talented learners must include the multiple facilitation of the emotional and social component of the personality.

6 Conclusion

The results of empirical research prove that the Project SOPHIA as an experimental project regarding the upbringing of children and education of academically gifted learners at eight-year grammar schools can be considered as one of the ways of developing academic talent in this type of school and the tool for the sustainability of gifted learner education within the Slovak educational system. Its primary focus on the creative, social and emotional area of gifted learners is considered as very beneficial. We also place this fact among the significant benefits of this project. The focus of the project on the emotional and social spheres of the personality of academically gifted learners also degrades a certain degree of egoism by society in relation to these gifted individuals. A disproportionately high preference for learning performance often indicates insufficient development of the emotional, social and creative components of the personality of talented individuals. Among these learners this deficit is at the expense of the development of dominant personality development.

We believe that today's society has resources in the form of a variety of programmes to develop emotionality and social side of the gifted people for who we can provide adequate options to survive his/her life as a full member of human society.

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