

# Creativity training programme – a part of gifted education programmes in Lithuania

Dr. Daiva GRAKAUSKAITĖ KARKOCKIENĖ<sup>a,b</sup>

<sup>a</sup> *Vilnius Pedagogical University, Department of Psychology of Didactics Lithuania*

<sup>b</sup> *Educational Center for Gifted in Lithuania*

**Abstract.** This article describes the provision for the gifted children and youth in Lithuania in Educational Center for Gifted in Lithuania as well as creativity training research in Vilnius Pedagogical University. Educational Center for Gifted was established in 2002 in Vilnius. The Center is the first organization in Lithuania aiming to deal with the special problems of gifted children and youth. It seeks to help people to recognize their abilities and use them in the best way in our changing society. The activity of the center seeks to encourage young people to become more responsible for their own future and pay attention to their real abilities (creative, intellectual, special). There are special programs for children. There are special courses for the teachers and parents. Our Center aims to bring together specialists and talented people who work with children and youth in other organizations which spend hours in a work with talented children with special needs in every week. The Center is a nonprofit public organization. We have already won the project in Lithuania “You can more” from Lithuanian Foundation for Educational Change (2002). In 2006 the Netherlands Foundations for Central and Eastern Europe supported the activity of Educational Center for gifted - the handbook of Creativity training for teachers, parents and students was published as well as summer camp was organized for the participants of the programs. Another part of the article is devoted to the problems of creativity training as a part of gifted education programs. The program of creativity training will be presented in details. Research extended during the period between 2004 and 2006 in Vilnius Pedagogical University, the pilot research was done in Educational Center for Gifted.

**Keywords.** Educational Center for Gifted, creativity training programs

## Introduction

Educational Center for Gifted was established in 2002 in Vilnius. The idea to establish the Center in Lithuania was formed by psychologists and other experts from Lithuania who took part in the conferences of NATO in Budapest 2002 and 2004.

There is only one center in Lithuania for gifted children and youth. Our center works with parents and teachers as well. We seek to help them to recognize the abilities of their children and help them to develop and support their children. Our Center aims to bring together specialists and talented people who work with children, youth, parents and teachers.

Our Center together with other institutions also does the scientific research seeking to

create the programs for developing creative abilities. The survey of the effectiveness of the program will be presented in the article.

**1. The aims of Center's activity:**

- To help children and youth to know more about their intellectual, social abilities and personal traits;
- To encourage young people to develop their abilities and to use these capacities in their future in active social life (professional career, social activity, etc) and to help them to find their place in the changing society;
- To organize groups for youth seeking to strengthen their personality traits (self-esteem, trust in themselves) and develop their communication skills;
- To organize training groups for preschool children (4-7 years old) from poor families; to help family in finding the best school suited for their children.
- To work with groups of teachers seeking to help them to know more about their pupils' abilities and help them to find their place in our society.
- To work with groups of parents and help them to recognize the intellectual, personal and social abilities of their children and develop them.
- To seek to encourage young people to become more responsible for their own future and pay attention to their real abilities. Special attention would be paid to the young people from social risky groups (drugs, alcohol, street children, etc.).

**2. Objectives of the activity**

- To help gifted young people to find their place in our society.
- To provide summer camps, seminars or meeting groups for children with whom we were in contact.
- To share information about young people's abilities with parents and teachers helping them to understand their own gifted children.
- To provide important information about education for the gifted and talented youth in our society for different education institutions in scientific conferences, articles etc.

**3. The forms of the Center activity**

- *Individual psychological consultations:* for pupils, students, parents and teachers seeking to know more about their talents and about the education for the gifted.
- *Various programs:* The programs would help to develop their creative,

intellectual and special abilities, to recognize and be conscious about real abilities and talents, to strength their self–confidence, positive self–evaluation and social ability.

- *Consultations for proper schools*: to help find the best school or other education institution (gimnasium, university, special school, etc.) according to their intellectual potential.
- *Other activities*: summer camps, conferences, seminars, providing public information of the importance of education for the gifted.
- *Scientific research* (subject: giftedness, creativity).

#### **4. The program for creativity training – a part of the gifted education programs**

##### *4.2. The main results of the research*

Today scholars put particular emphasis on creativity. A definite part of scholarships inquiring particularly about the problem of human creative power covers a wide range of aspects of training for creative thinking. The present work seeks to explore the chances of fostering the cognitive and the personality components of creativity in university students (2006). The pilot research was done in Educational Center for Gifted.

The present research regards divergent thinking as a cognitive component of human creative power. The parameters of divergent thinking measured by the present research include fluency, flexibility, and the originality of thinking. Thus, this particular aspect of creativity is highlighted in this work in order to verify the chances of training for divergent thinking by means of a special training programme.

Training for creativity means now the fostering of human potentialities and the elaboration on inborn abilities. Both goals may be achieved by securing adequate training conditions and by using special training programmes. As it is indicated by foreign scholars, creativity training programmes can influence creative abilities effectively. Clearly, creativity training techniques and corresponding programmes are employed rather extensively in a number of areas (Scott et al., 2004; Plucker, Runco, 1999; Parnes, 1999).

To quote S. J. Parnes (1999), creativity training programmes may: (1) speed up one's mental operations and help utilise one's all resources; (2) assist the assimilation of new information, develop one's susceptibility to new information, and encourage one's conscious curiosity facilitating in this way the spotting of relationship among distant areas of interest and operation; (3) eliminate a hindrance to the free functioning of mental operations and associative mechanisms; and (4) extend the area of creative processes for the effective promotion of creative power. As is indicated by a number of psychological studies, multiple programmes have been used for creativity training purposes. They were aimed at finding out what particular components of creative power responded to training. The research produced evidence that training was able to influence the cognitive, the personality (behaviour, attitudes), and the motivation component of creativity (Plucker, Runco, 1999).

#### *4.2. Scientific novelty and practical implications of research*

Different psychological studies give different views on creativity and on the chances and methods of training for creative thinking. On a world scale, there are numerous and multiple studies on creativity training which have provided rather contradictory evidence. By offering an exhaustive analysis of the problem of creativity and training for creative thinking the present research tackles a subject underestimated excessively by Lithuanian psychological scholarships. Moreover, it provides a systematised body of data available from relevant research works carried out until now, and advances a more precise approach to creativity and training for creative thinking – it's all was done for the first time in history of Lithuanian psychological scholarship.

The present work is a novel one from another point of view: worked out within the context of corresponding Lithuanian and foreign studies, validated by pilot research extending over several years in Educational Center for Gifted and Vilnius Pedagogical University, and described detailed (structure, premises, validation, and methods), the programme is offered to Lithuanian users for the first time in history of national psychological scholarship. Moreover, it offers a comprehensive training programme for the fostering of multiple components of creativity.

Thus, it is possible to assert that the present research is novel from the following points of view: firstly, for the first time in the history of Lithuanian and, partly, foreign psychological scholarship a systematised theoretical material is presented; secondly, a detailed description and a theoretical foundation of creativity training programme utilised in the present research is given; thirdly, an experimentally validated proof of the programme's effectivity is produced, and fourthly, practical recommendations on the real chances of training students' creativity are provided.

The present research is significant from the point of view of its practical application: findings of the present research may be utilised by future researchers seeking to draw up creativity training programmes or to investigate into programmes' effectivity within groups differing in terms of participants' age or education. This particular programme may be used successfully for the training of students' creative power. The programme may be utilised by specially trained professional psychologists in their daily working activities. Findings of this research may contribute to the improvement of the overall quality of studies at Lithuanian higher schools. More specifically, they may facilitate the renovation of methods used to impart education contents to students, or they may help to introduce active teaching techniques for the encouragement of independence and co-operations.

#### *Research aim and objectives*

The present research *aim* - to reveal the characteristics of change in cognitive creative abilities of pedagogical profile social science students, and assess the chances of activating corresponding abilities via special training programme.

*In support of the research aim, the following objectives were set:*

1. To determine the level of effectiveness of the programme drawn up and specifically designed by the author for the training of cognitive creative abilities and the strengthening of attitude to one's creativity in students.
2. To reveal the level of statistical significance of separate cognitive creative abilities (the fluency, the flexibility, and the originality of thinking) under a special creativity training programme.
3. To reveal the specific qualities of students' attitude to their own creativity, and the level of statistical significance of their change under a special creativity training programme.
4. To determine the interdependence between a change in students' cognitive creative abilities activated by their training under a special programme and the structural qualities of intellect.

#### *Research method*

*Participants.* Research involved 160 second - fourth year social science students at Vilnius Pedagogical University (mean age - 23 years), including 138 females and 22 males. Pilot group participants (n=80) received a four months' training with 2 h/week training sessions (32 hours in total) under *The Creativity and Self-actualisation Training Programme* drawn up by the author. Training groups consisted of 20 participants each. The programme was drawn up and employed within the context of *Psychology of Creativity* subject offered to students by Vilnius Pedagogical University.

#### *Training methods*

Drawn up and validated by the author of the article, *The Creativity and Self-actualisation Training Programme* was used to foster students' creative abilities.

#### *The programme purposed to:*

- \* Develop students' cognitive creative abilities and the need to reveal their own creative powers by cognitive and personality techniques for the fostering of their own creativity.
- \* Acquaint students with the psychological theories and studies dealing with creativity as well as with the techniques and programmes designed to foster creative power.

#### *Programme assumptions:*

The programme is based on the assumptions of humanistic-existential and Gestalt psychology as well as on the postulates advanced by psychological theories of creativity. First of all, it rests on the humanistic theory contending that the character of each person conceals a tendency towards growth and self-actualisation. The programme is designed so as to give each trainee a chance of self-actualisation on the grounds of a vital human ability,

i.e. the ability to realise one's thoughts, senses, images, feelings, and desires.

The programme also draws upon the internal (openness to experience, internal source of assessment, and ability to use available information in an unconventional way) and the external (secured psychological safety and psychological freedom) conditions for constructive creative activity defined by C. R. Rogers (1961).

The programme is founded on the existential approach (May, 1959) to a growing human, and on the principles of sense, will, internal responsibility, and holistic education. Yet, above all, the programme rests upon the Gestalt theory of learning (Grenstad, 1996) and F. Perls' (1968) principle asserting that learning means discovering.

The role played by a group leader is essential in programmes designed to foster creativity. Understandably, the group leader did her best to promote an atmosphere of honest work and friendly co-operation which is absolutely necessary if one seeks to make each group member feel safe and free to join oncoming activities according to his or her abilities without feeling tense or repressed. Lively and enthusiastic learning prevailed. The leader's behaviour encouraged each participant to be active and outstanding. The leader offered a chance to everyone to express his or her opinion and ideas.

#### **Expected results:**

1. Creative thinking abilities are strengthened.
2. Programme participants realise their cognitive and personality qualities related to creativity; moreover, their confidence in their own creative power increases.
3. Programme participants realise to a greater degree their creative potentialities applicable subsequently to their daily activities and professional work.

#### *Assessment methods*

To carry out the present research, the following *assessment methods* were used: *Torrance Test of Creative Thinking - TTCT, 1974, verbal part, form A*, by E. P. Torrance was used to estimate cognitive abilities related to creative thinking (the fluency, the flexibility, and the originality of thinking).

*To assess a subjective level of actual or desired creativity Dembo-Rubinstein's polar profiles' technique was employed.* Dembo-Rubinstein's technique is targeted on subjects of any age. In this work Dembo-Rubinstein's technique was employed jointly with other methods in order to elicit from subjects their subjective opinions on their own creative power. The following four parameters were chosen, namely creativity, originality, ability to generate ideas, and curiosity. We believed that these parameters reflected the nature of creativity to the greatest degree, and that they were the most understandable ones to our subjects. Each group member was given a sheet of paper with four scales drawn on it.

Students were asked to rate their own creativity, originality, ability to generate ideas, and curiosity in two ways: (a) by marking on the scale their actual position in terms of the above-mentioned parameters, and (b) by marking on the scale their desired position. The character of participants' reply to each question was reflected quantitatively on a -3 to +3 scale.

The techniques were administered to all subjects twice, at the beginning and at the end of research.

#### *Results of the research*

1. Analysis of cognitive creativity parameter (fluency, flexibility, originality) estimates measured by E. P. Torrance TCT (verbal A form) and subjective rates of one's own creativity measured by Dembo-Rubinstein's technique showed that the creativity training programme drawn up and subsequently used by the author was effective.
2. All differences between the arithmetical means of creative cognitive ability estimates revealed in the course of the treatment and the control test were statistically significant,  $p < 0.001$  (Empirical values of Student's  $t$  criterion: fluency -  $t = 5.23$ ; flexibility -  $t = 6.28$ ; and originality -  $t = 7.03$ ).
3. Training under a special programme produces the most prominent growth in the estimates of originality and flexibility. A rise in the estimates of fluency is not as high yet it is also statistically significant. These findings are consistent with the data provided by other authors who carried out exhaustive investigation into the problem of training for creative thinking (Scott, Leritz, Mumford, 2004).
4. Training under a special creativity programme produced a change in rates reflecting subjects' attitude to their own creativity, both actual and expected. The most prominent increase was observed in actual creativity rates ( $p = 0.0004$ ), desired creativity rates ( $p = 0.033$ ), actual originality rates ( $p = 0.001$ ), desired originality (0.037), actual ability to generate ideas (0.012), and desired curiosity rates ( $p = 0.024$ ). Students trained under a creativity programme realise and recognise to a greater degree their own abilities. Moreover, the level of their desire to become more creative goes up.

#### **Conclusions**

##### *The programs of Educational Center for Gifted helps:*

1. Children and youth to know more about their intellectual, social abilities and personal traits.
2. Young people develop their abilities use them in their future active social life (professional career, social activity, etc) finding their place in the changing society.
3. Parents, teachers and children know more about possibilities to develop abilities and could do it together as one community.
4. To make real steps fostering young people abilities, strength their potential abilities and creativity.

5. Learning methods used in the present research for the activation of creative powers may be applied to the teaching of students and elder pupils. Students' training under a special creativity programme produces a favourable influence on creative abilities facilitating better realisation of one's creativity and better evaluation of its possible implications. One's creativity, particularly, one's cognitive creative abilities and appreciation of one's creative power help a personality to release his or her creative power both in everyday and professional activities.

### References

- [1] Grakauskaitė Karkockienė D. Kūrybos psichologija (Psychology of Creativity). Vilnius: Logotipas, 2003, 256 p.
- [2] Grakauskaitė Karkockienė D. Kūrybos psichologijos pagrindai (Basics of Psychology of Creativity). Vilnius: Logotipas, 2006, 101 p.
- [3] Grakauskaitė Karkockienė D. Kur dingsta Kodelčiukai? (Where do the "why askers" go?, Handbook for teachers, parents, students). Vilnius: Logotipas, 2006, 74 p.
- [4] Scott G. , Leritz L. E., Mumford M. D. The effectiveness of Creativity Training: a quantitative review. Creativity Research Journal, 2004, Vol. 16, Issue 4, p. 327-361.
- [5] Plucker J. A., Runco M. A. Enhancement of Creativity // M. A. Runco, S. R. Pritzker. Encyclopedia of Creativity. San Diego, Ca: Academic Press, 1999, p. 669-675.
- [6] Parnes S. J. Programs and Courses in Creativity // M. A. Runco, S. R. Pritzker. Encyclopedia of Creativity. San Diego, Ca: Academic Press, 1999, p. 465-477.

*For more information about the Educational Center for Gifted activities and programmes:*

*Daiva Karkocienė*

*Email: [daigrak@lc.ff.vu.lt](mailto:daigrak@lc.ff.vu.lt)*

*tel. mob. 8683 11803*

*Educational Center for Gifted*

*Daukanto a. 1*

*LT – 01122, Vilnius*

*Lithuania*

