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STUDENT CREATIVITY AND BEHAVIOURAL PROBLEMS¹

Abstract: This paper elaborates on the relationship between creativity and behavioural problems of primary and secondary school students. The relationship is considered from the perspective of creative students as well as of students with problems which were identified on the basis of research results and teachers' experience from school practice. Some creative students experience behavioural problems and they are in need of help to complete their formal education and preserve their authentic creative expression. On the other hand, some students with behavioural problems are creative and they need support in order to express their creativity through school-related activities. Four groups of explanatory resources have been identified to answer the question why creative students provoke, irritate, and confront with the lack of understanding of their teachers and peers. These include: specific personality characteristics of creative individuals; features and conditions of the creative process; inadequate reactions of social environment; and ambiguous social values. In conclusion, some implications for improvement of educational practice have been outlined that may contribute to expression and development of creative potentials of all students.

Key words: creativity, students, behaviour, problem.

KREATIVNOST I PROBLEMI U PONAŠANJU UČENIKA

Apstrakt: U radu se razmatra odnos između kreativnosti i problema u ponašanju učenika osnovne i srednje škole. Relacija je posmatrana iz perspektive kreativnog učenika kao i učenika sa problemima u ponašanju, koji su definisani na osnovu rezultata istraživanja i iskustva nastavnika iz školske prakse. Neki kreativni učenici imaju probleme u ponašanju i treba im pomoć kako bi savladali formalno obrazovanje i sačuvali svoj autentični kreativni izraz. S druge strane, neki učenici sa problemima u ponašanju su kreativni i treba im podrška da bi pokazali svoju kreativnost kroz aktivnosti relevantne za školu. Identifikovane su četiri grupe faktora kojima se može odgovoriti na pitanje zašto kreativni učenici provociraju, iritiraju i nailaze na nerazumevanje svojih nastavnika i drugova. To su: određene osobine ličnosti koje odlikuju kreativne pojedince, karakteristike i uslovi koje traži kreativni proces, neadekvatne reakcije okruženja i ambivalentne društvene vrednosti. Izvedene su implikacije za unapređenje vaspitno-obrazovnog rada koje bi doprinele ispoljavanju i razvoju kreativnih potencijala svih učenika.

Ključne reči: kreativnost, učenici, ponašanje, problemi.

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Introduction

We are all familiar with numerous anecdotes from lives of famous scientists and artists regarding the various obstacles they had encountered during their schooling and how they managed to overcome them. These examples are positive, since eminent creators managed to cope with the challenges imposed upon them by developmental characteristics of childhood and youth and by the reactions of their environment. The question arises as to how to recognise the largest possible number of creative children at younger age and provide them the support that will help them in coping with the obstacles they are facing.

Creatively gifted students are characterised by great curiosity; these students tend to do things their own way; they prefer individual work; tend to experiment with everything at hand; they have active imagination; they are capable of approaching a problem in different ways or achieving their goal by different paths; they exhibit a tendency to provide unexpected, unusual and wise answers; create original ideas; they are inclined towards adventures and risks; have an exceptional sense of humour; they are sensitive to the beautiful; show lack of conformity and interest in details; they are not interested in social acceptance; show a tendency toward rejecting the known; insist on working and discovering for themselves; resist pressure to conform; they are frustrated by externally imposed boundaries and deadlines; they exhibit rebellious behaviour (Kitano & Kirby, 1986).

Why do some creative students have problems, stir anger, provoke, irritate, confront with the lack of understanding from their environment, and how is it possible to discover among students with behavioural problems those being such because they are creative? In order to find the answer to these questions, this paper analyses the results of research studies regarding the following: peculiarities of social-emotional characteristics and adjustment of the gifted, talented and creative children and youth; the problems creative students experience with low academic achievement; the frequency of occurrence of attention deficit hyperactivity disorder (ADHD) among creative students; gifted education and nurturing creativity at school; and, public opinion and social valuation of creativity.

Giftedness, creativity, and social adjustment

Several surveys of research data indicate that the majority of gifted children and youth achieve a satisfactory, favourable level of social stability and adaptation (Maksić, 1993; Neihart, 1999). Some researchers argue that the gifted, talented and creative young only react more intensively to developmental problems all children and youth face in the process of growing-up. In adolescence, these comprise becoming independent, adopting roles and building one's identity. Other researchers, for

their part, insist more on specific difficulties encountered by the gifted, talented and creative young, that stem from the inability to balance their personality and the temptations caused by the demands of the developmental period they are going through. Therefore, exceptional sensitivity, inclination towards perfectionism, awareness about being different can aggravate communication with the environment and lead towards loneliness and isolation. An increasing number of experts give precedence to individual differences within a group of the gifted over differences between the gifted and the non-gifted (Maksić, 1993).

Once the differences within the group of gifted students are taken into account, consideration of the relationship between creativity and behavioural problems gets an answer which is probably closest to reality. Betts and Neihart (1988) described profiles of the Successful, the Independent, the Challenging, the Underground, the Double-labelled, and the Dropouts students. The majority of gifted students belong to the Successful type and are recognised as students with high abilities, successful at school and accepted by their peers, parents and teachers. They are characterised by an inclination towards perfectionism, the need for teacher's approval and guidance in school work, conformist behaviour and dependence. Unlike the Successful gifted students, Independent gifted students are successful, but creative as well. They develop a stable personality, accept themselves and others, and are accepted by their environment; they are ready to face risks and their own failure; do not succumb easily to persuasion; they work independently, develop their goals and are persistent in their achievement.

It is interesting that the remaining types of gifted students who experience problems with school achievement and discipline are also creative. The Challenging are divergently gifted, sensitive, impatient, change moods easily, have weak self-control and low self-esteem. The Challenging type, which is very creative, is characterised by constant standing out and confrontation with the teacher, asking questions and correcting the teacher. The Underground negate their own talent for fear of being different too much from their environment. These students are insecure, confused, unreliable, burdened by the feeling of guilt and inconsistent in friendships. The Double-labelled suffer from some impairment (physical, emotional) that their environment pays no attention to. These students are powerless, frustrated and haughty, with low self-evaluation and changeable success in work. The Dropouts are bitter, depressed, explosive, and have a bad opinion about them-selves, they cannot maintain attention, work inconsistently, do not persevere on their tasks, isolate themselves, and they are critical. Although the Dropouts demonstrate high creativity, since they often abandon school, they are perceived as average or below-average, and they are rejected and lonely.

To sum up: Creativity at younger ages is perceived as a creative capacity and a potential for creative thinking and production, and it is considered within giftedness. Gifted students who exhibit maladjusted behaviour are often creative.

Creativity and academic achievement

Creative students are capable of using the process of selective insights in solving problems; they deal with significant issues and provide an holistic solution; they are capable of tolerating ambiguities, willing to overcome obstacles and persevere; they show high interest and love in what they do (Sternberg & Lubart, 1993). Research on children's process of creative thinking reveals a critical role of knowledge base that is acquired from earliest childhood (Feldhusen, 2002). The problem of relationship between creativity and knowledge, in school context, is often set as the problem of relationship between creativity and school achievement, due to the influence it exerts on continuation of schooling, motivation for further learning, the choice of profession and progressing within it.

Studies of the relations between the level of intellectual abilities, creativity and school achievement reveal that secondary school students who have both high intelligence and high creativity get the best marks in many school subjects (Heller, 1995). However, research indicates that, as early as in primary school, students who have a low school achievement also attain high creativity scores, and that there are more boys than girls among them (Maksić & Đurišić-Bojanović, 2004). One fifth of students who teachers declared to be difficult to work with (difficulties being unsystematic learning, lack of interest, lack of discipline, family problems, truancy, confrontation with peers) belong to the category of students with highest abilities (Đorđević, 1995). The same research study showed that gifted students with low academic achievement were absent from classes more often and had more health problems than others, as well as that there were more boys than girls among the academically unsuccessful gifted students.

Comparison of characteristics of gifted and non-gifted secondary school students points out to the role of creativity in underachievement. Intellectually gifted academically successful students show controlled emotionality, lack of aspiration towards creative expression and dissociation of emotions (Altaras, 2006). Gifted underachievers are characterised by intellectual curiosity and motivation for cognitive mastering proportionate to their potential, but there is a lack of a crystallised academic achievement motive, which implies readiness for disciplined and persistent work while appreciating external criteria for successfulness. Gifted underachievers have a non-analytic cognitive style, focused towards creative expression, and search for experiences and modes of expression that are intuitive, imaginative and aesthetic in nature. Altaras assumes that underachievement of gifted students derives from their preference for a holistic-divergent cognitive style in which affective, discursive, hypothetical-deductive cognitive activities cede to passive, metaphorical and analogue cognitive processes.

Emphasis on and support to high school achievement on teachers' and parents' part can have an unfavourable impact on demonstration and development of student creativity. Freeman (1995) found that creatively oriented students as a whole obtained considerably lower marks in final school exams than academically oriented students. Academically oriented students scored highest on measures indicating problems in relationships with peers, while the creatively oriented had no problems with friendships, and on the whole were popular. The academically oriented often saw their high ability as a part of themselves unattractive to others. Contrary to this, creatively oriented students paid no attention to that or were even proud of their intelligence. Freeman recommends to teachers to work on overcoming the conflict between the need for emotional control, which high school achievement demands, and the need for a freer approach and an open spirit, which is a condition for creative expression.

To sum up: Indulging in the creative style of thinking and reacting reduces student chances for high academic achievement in regular school curriculum. Orientation towards academic achievement lowers the chances for student creative expression.

Creativity and ADHD

Considerable number of studies conducted lately refers to studying the relationship between creativity and attention deficit hyperactivity disorder (ADHD). These studies were inspired by the experience from school practice when creativity and ADHD occurred together, and teachers did not know which issue to prioritise in working with students. At younger ages it was found that impulsive/hyperactive and disruptive behaviour was positively correlated with some aspects of creativity (connected to better achievement on fluency), and that more careful and less introvert behaviour was correlated with better achievement on flexibility. It was concluded that lively student behaviour can be a predictor of creative thinking (Brandau *et al.*, 2007). According to Healey and Rucklidge (2006) study, as many as 40% of creative children had clinically elevated levels of ADHD symptomatology, but none of them fulfilled all criteria for ADHD. In this research the creative group with ADHD symptoms performed better from the ADHD group on the measures of working memory and inhibitory control.

Studies of creativity among students with ADHD and the ADHD presence in creative students show that one third of students from ADHD group achieved such a high score on creativity test that they could enter the Creative school program: they were especially good at elaboration, which refers to paying attention to details and embellishing ideas (Cramond, 1994). One quarter of students from the creative group fulfilled the criteria for ADHD, attention deficit disorder with or without hyperactivity. However, according to their teachers' estimation, these children did not exhibit an elevated level of hyperactivity, inattention or impulsivity. Cramond

(1994) points out to the danger of giving a diagnosis that does not have to be supported by other measures. Healey and Rucklidge (2005) found that there were no significant differences between the achievement of the ADHD group and the control group on several creativity tests, based on which it was concluded that the children with the diagnosed ADHD were not more creative than the children who were not diagnosed with it.

Abraham *et al.* (2006) compared creativity of three groups of adolescents: the ones with ADHD, with behavioural problems and the healthy control group. The ADHD group showed greater ability to overcome limitations under the influence of given examples, but reduced capacity for generating functional invention on the imagination task. The control group had a superior achievement on the recently activated knowledge task, but poorer achievement on practical measures of the creative imagination task. The group with behavioural problems performed worse than the control group on the component of originality of the creative imagination task. Original imagination and practical imagination for the ADHD group and the group with behavioural problems were negatively correlated, but that was not the case for the control group. The ADHD group produced more unusual answers, while the group with behavioural problems generated a larger number of usable and practical answers.

To sum up: Impulsiveness, risk taking and emotionality are important characteristics of both the creative students and the students with attention deficit hyperactivity disorder.

Nurturing creativity at school

Why are creative students restless, impatient, have problems with maintaining attention, focused on their own needs (to the point of selfishness) and »difficult« for teachers? Creativity is all about finding new ways for solving problems and giving new answers; it resists the routine, the common and expected; entails readiness to take risks in trying and investigating; the courage to view and see things differently; to doubt the known. Typical school is organised according to class and subject teaching, which for the most part takes place in the classroom, with a teacher teaching in front of the blackboard and students sitting in their benches and listening. Students are requested to be obedient, passive, and dependent. It is believed that creativity is a gift, a privilege of the minority, present only in renowned artists, inventors and scientists (Alenkar, 1998).

Development, expression and nurturing of creativity is a desirable goal that is positioned more as an ideal to strive towards than as something expected in school reality (Maksić, 1999). Observation of school practice and monitoring of effects of schooling indicates the lack of creativity in most students and teachers. It is often objected

that school does not allow the demonstration of creativity in students and teachers to a sufficient and desired extent, and that the most capable students are either neglected or swamped with inadequate contents and activities. Providing conditions that are suitable for creative behaviour of teachers and students at school and that support creativity or form a good basis for creative expression, promises improvement of school practice. Although creativity is the goal of teaching and learning at school, if teachers do not value creative products in their work and creative behaviour of students has no impact on their school achievement, there is a small chance of things changing for the better.

Many teachers do not like personality traits and behavioural characteristics connected to creativity in their students, but at the same time they declare that creativity should be encouraged at school (Cropley, 1996). In order for children and youth with special abilities to develop their capacities up to the level that involves creative production, they need adequate support at school and a stimulating environment created by the teacher (Maksić, 2006). Teachers who are successful in developing the talent and creativity of their students are characterised by abilities and skills to organise instruction that is suited to student abilities, and are mostly motivated by the fact that they are creative themselves. The results of implementation of creativity programs lead to the conclusion that the role of school in encouragement and development of youth creativity can be fulfilled completely if compulsory curriculum and regular instruction provide space for expression of student and teacher creativity. This implies that school should open up for child imagination, inventive behaviour and independence with respect to authorities and reproductive activities.

To sum up: Educational support to creativity at school is inadequate or not-sufficient. Regular school setting does not have enough understanding for creative students and teachers.

Public opinion on the gifted and creativity

Public opinion studies on educational support to the gifted in Serbia yield similar results to the ones obtained throughout the world (Maksić, 1998). Secondary school teachers include creativity in their implicit theories of giftedness, while students and their parents adhere to abilities and learning. Participants' demands with respect to educational goals depend on student category they refer to: in education of the gifted priority is assigned to encouragement of creative orientation, and in other students to development of their diligent orientation. Among the studied groups, teachers, students, and their parents, special forms of work with gifted students are supported most by teachers and least by students. It was concluded that interested groups showed a high acceptance of special educational treatment, but at the same time there is fear from elitism, egotism and isolation of the gifted.

The results of the research study on primary and secondary school students and university students, the future nursery and school teachers, indicate a large importance of creativity in the personality and behaviour of a talented individual in order to be able to give a creative contribution, but a very small one in getting eminence and winning social appraisal (Maksić, 2000). Acquaintances and connections with significant and influential people in economic and political life and a large capital at one's disposal are seen as the most important conditions for success in a transitional society. Success does not come as a result of personal endeavours and efforts invested by an individual, a motivating competition and a fair contest in which the best one wins, but as the consequence of a web of vague circumstances. In such a situation, creative expression in science, art and other domains of social life is discouraged, which consequently hinders society's exit from the crisis, and motivates young creative people to leave the country.

Support to imagination in childhood can be observed as a desirable precondition for the development of individual's creative orientation and the manifestation of creative behaviour in adult age, but also as a driving force of further social development. The research study, based on the World Values Survey, compared the preferences of educational goals on representative samples of the citizens of Serbia, and Great Britain, France and Germany (Pavlović & Maksić, 2009). Similarly to the elites of three traditionally most influential European countries that have effective democracies, the Serbian social elite values child imagination considerably more than the general population. However, as opposed to the elites of the countries that were compared to Serbia, the Serbian social elite does not participate in political life of the country nor has a desire to, which implies a small possibility that it will be active in advocating offering more support to child imagination and creating a wider social support to creativity.

To sum up: Public opinion is ambivalent towards creative individuals and creative behaviour, which is transferred to creative children and the educational support to expression and development of creativity at school.

Conclusion

The relationship between creativity and behavioural problems of primary and secondary school students is considered from two viewpoints: from the perspective of creative students and from the perspective of students with behavioural problems. Research results and experience from school practice indicate that some creative students experience behavioural problems and are in need of help to complete their formal education and preserve their authentic creative expression. On the other hand, there is research evidence that some students with behavioural problems are creative and that they need support in order to demonstrate their creativity through school

activities and persuade their environment that they are creative. Gender differences have to be conceded in future research on the issue.

Four groups of factors have been identified in the paper in order to answer the question why creative students provoke, irritate and confront with the lack of understanding of their teachers and peers. These include: specific personality characteristics of creative individuals; features and conditions of the creative process; inadequate reactions of social environment; and ambiguous social values. Creative process has its structure and the dynamics that is necessary in order to obtain a creative product, and which can seem to the environment as a non-response to the task, waste of time, laziness, the lack of seriousness and lack of concern for circumstances and other people. However, student and teacher creativity at school cannot be observed only from their own point of view. Besides the question how to enable the creative individuals to »survive« in the school system, it is equally important and socially justifiable to ask how the system can function successfully if it accepts student and teacher creativity.

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