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FROM SCHEMES TO THE TEACHER'S PEDAGOGICAL CREATIVITY IN CYBERCULTURE

The specificity of the teacher's mission in cyberculture

Cyberculture is changing every aspect of life and sphere of activity. In cyberculture communication is done with the dominance of computer network or other digital media (e.g. mobile phones). In this area there is school and its objects. Also, changes in the labour market and in the workplace, as well as the development of technology in cyberculture mobilize the employee, including the teacher, to be constantly active and to update their professional knowledge.

Despite changes brought by cyberculture, the teaching profession puts the teacher under certain obligations, tasks and requirements arising from social needs. High qualifications and specializations are required from the teacher (Day 2004). Teaching and educating children and youth and being responsible for the processes are important characteristics that distinguish this profession from others, and are also a great responsibility of every society. Besides moral obligations to students the teacher has responsibilities towards their own professional group, school environment and the whole society (Dylak 1995; Kwiatkowska 2008; Szempruch 2013).

Cyberculture contributes to breaking the limits formed in education. As a result, the teaching profession is of variable nature. During professional development the teacher gradually shifts from patterns to educational creativity. As every human being, including the teacher, is other-directed (Popek 2003), this text presents teaching creativity that develops along with the professional development of the teacher. But first, as an introduction I will explain the concept of *creativity*, and I will outline my own concept of pedagogical creativity of teachers and their professional development.

Formation of the *creativity* concept

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In the twenty-first century the concept of creativity is widely used. At the same time, it is constantly changing its scope and depth. Creativity covers human activity in the world. Thus, creativity means any human activity that goes beyond simple provided information (Tatarkiewicz 2005). A creative individual is not limited to copying but gives something new from oneself. External stimuli are not complete. For these reasons, the creative individual is looking for additional knowledge to form their own world, integrating its elements. This understanding means that shortages in knowledge are complemented with external data. Thus, creativity refers to people who paint, compose, think and who are active (Tatarkiewicz 2005).

Creativity has not always been understood and interpreted in this way. In ancient times and the Middle Ages creativity was an attribute of God. It was believed that a human being recreates objects created by God (Tatarkiewicz 2005; Nęcka 2001). However, in the Renaissance people gained a sense of their independence, freedom, autonomy and creativity. It was assumed that the artist shaped the new world, the new reasons.

In the seventeenth century Maciej Kazimierz Sarbiewski, Polish poet and poetry theoretician, compared the actions of the poet to God's creation. This contributed to the fact that the concept of the *creator* was referred to the activity of artists. Then, in the 19th century the term was used in relation to artists, poets, painters, sculptors, and musicians. And in the 20th century it was used in science and social life (ibidem).

Later on, the concept slowly came to European culture. Finally, in the 20th century the term was applied to the whole of human culture.

Nowadays, in everyday language creativity is often identified with creativeness, which are synonymous but not identical. Creativity is understood as potential human abilities, the results of which are not tangible or relevant to a particular social group and which are in each individual (Szmidt 2013).

Creativity manifests itself in activity, behaviour, attitudes, lifestyles. It can be developed through proper education (Pietrasiński 1969; Popek 2003; Nęcka 2001; Strzałecki 1969; Szmidt 2013). Currently, studies on creativity concentrate on personality traits, the process of creation, output, values and lifestyle (ibidem).

Since the mid-twentieth century creativity has been treated subjectively, as the personal function of creation (i.e., personality traits, the process of creation) is emphasised. The subject is creative when it has specific features. And the creative activity takes place in the mind, the psyche of the creator, which contributes to its development and learning (Magda-Adamowicz 2007, 2009, 2011, 2012, 2015).

Before the mid-twentieth century the works of creation and its impor-

tance to a wider social group were emphasised in creativity. Thus, creativity was treated objectively, because the social importance of a product of the creative process as an element of culture was taken into account. Therefore, the effect of intended creativity, that is externalised thinking, and the creative process is a piece of work. It is assessed from the perspective of time, including past, present and future. That is why time period in which the work was invented and implemented is important, as well as its relevance for the future. It may happen that the work is believed to be creative: 1) without taking into account similar works produced in other areas, and therefore creativity is distinguished in the macro- and micro-scale and 2) in history it may lose its importance.

There are numerous theories of creativity, which represent two basic approaches to it: 1) elite approach – the so-called object approach – which assumes that only outstanding individuals are creative, because they make a lasting contribution to the development of culture, 2) egalitarian approach – the so-called humanistic or subject approach, which emphasizes personal involvement in the process of creation and its importance for the development of the creator's personality. Authorities that emphasise the unique novelty, originality of the creation from the perspective of a wider social circle, at the same time advocate for the creativity of only prominent individuals. Elitism values the social function of creative work, that is the degree of its novelty, originality and relevance to society, or in other words creation must be objective, historical, or unique. On the other hand, egalitarianism of creativity is subjective, personal, everyday, and common. Arbitrators take into account the subjectivity of the novelty and the value of the creation, and they opt for creativity of any person, including children.

The author adopts the egalitarian approach, and therefore she is of the opinion that creativity is present in each individual and results from the difficulty of integrating motives of adaptation to the environment, and the conflict between the will and the counter will, as well as human drive to develop. It occurs at the level of self-realization as a key factor in human life. Creativity exists in every phase of life, especially in the seventh phase of generativity when the individual goes beyond oneself, and it is of conscious and unconscious type.

The author's concept of teachers' pedagogical creativity

It is believed – due to humanistic and pan-creationist orientation – that human beings are inherently creative. Therefore the psychology of creativity “empirically oriented distinguishes two types of creativity: objective and subjective creativity” (Popek 2003, s. 19).

Objective creativity means discovering, creating new, original and unique ideas appearing in the spiritual and material culture for the first time. Subjective creativity occurs quite often and it is called secondary, everyday, common, or methodical creativity. It involves uncovering the truth that already exists but the creator was not aware of its existence (ibidem). The greater the cultural importance of given creativity, the greater its social dimension, reaching the objective level.

On this basis I distinguish subjective and objective pedagogical creativity, both of lower and higher range, which I thoroughly studied theoretically and practically in the following monographs (Magda-Adamowicz 2007, 2009, 2011, 2012, 2015) and referring to the levels of creativity by E. Necki (2001) and S. Popek (2003) and the areas and dimensions of creativity by R. Schulz (1994).

Thanks to pedagogical creativity by R. Schulz I have accepted the narrow understanding of teachers' pedagogical creativity, which I limit to creativity in the teaching and caretaking process during classes and extra-curricular activities, and the effects of which include innovations. Holistic inspirations in pedagogy and psychology make it possible to study the most important predictors of pedagogical creativity, i.e. knowledge, characteristics of divergent and creative thinking, creative process, creative language, imagination, goals and motives of pedagogical creativity, creative attitudes and behaviour, their creations (innovations and proprietary curricula) and the external environment of pedagogical creativity.

Subjective pedagogical creativity fits into the concept of everyday creativity as "creativity for everyone", or methodical creativity, and is self-fulfillment for an individual (ibidem). I distinguish 1) *subjective pedagogical creativity of a narrower scope*, which includes meetings with the student or imitative innovations or the scope and level of theoretical knowledge, and 2) *subjective pedagogical creativity of a wider scope* – effective pedagogical work and innovation or proprietary curricula created in teams.

Objective pedagogical creativity (historical, original, outstanding, exceptional creativity) means discovering, creating new, original, unique ideas, emerging in pedagogical culture for the first time. I distinguish 1) *objective pedagogical creativity of a narrower scope* – solving educational problems in a creative way, processes of pedagogical changes and individually created proprietary curricula, and 2) *objective pedagogical creativity of a wider scope* – creative work style, professional self-realization, the creation of new ideas and concepts.

Professional development of the teacher

Teacher professional development, as the conditioned process, is willingness to improve their theoretical and practical knowledge, professional skills and to become involved in socio-professional activities. It is determined by the requirements and tasks of contemporary society. Internal regularities of this process are subordinate to common laws and apply to all teachers. Professional development is an internally consistent process, i.e. one type of behaviour and activity is the basis for others. The direction of the development is subject to social control and repression, which in the course of pedagogical practice interiorize at the teacher. Owing to this, the teacher performs their professional duties and integrates needs, tasks, and teaching activity, contributing to a dynamic, targeted, and even creative development. The effects of the teacher's activity are hard to measure, because they often depend on many other co-existing factors beyond the control of the teacher. Hence the teacher's self-control, self-assessment, reflectivity, and sense of responsibility in teaching are of great importance. Today, the teacher should be objective, kind, empathetic, sensitive, imagination, responsible, and understanding but at the same time consistent, helpful, active, creative, fond of pupils and teaching, which is conditioned by systematic development of substantive, pedagogical, methodical and social knowledge. Among numerous factors that determine the teacher's work three areas should be particularly emphasized. One area includes the emotional, volitional, incentive features of the teacher's personality. Then, there are intellectual and causative features of the teacher's personality, which include knowledge, skills, competence and abilities. There are also situational factors of the teacher's work, which are the external conditions of the educational process. However, these factors are not thoroughly analysed in this article, as they do not constitute the basis of further considerations.

The successful professional development of the teacher is a tendency to increasing independence from external pressure. Developmental changes relate to the increase in autonomy, criticism and non-conformism. In the professional development of the teacher several stages can be distinguished. Robert Kwaśnica (1994) and Henryka Kwiatkowska (2008) distinguish three stages of professional development: pre-conventional, conventional and post-conventional stage. And Stanisław Dylak (1995) adopts a different classification, distinguishing the basic, necessary and desirable stages.

Pedagogical re-productivity and creativity in the professional development of the teacher

The stages of the teacher's professional development which I have adop-

ted on the basis of the literature are closely connected with the progressive changes in a given field, increase in methodological knowledge and skills, development of the need for self-assessment and self-control at work. Therefore, professional activity develops from reconstructive to creative activities, which I will attempt to prove below.

During the first stage of conformism, a young teacher, starting his/her job, follows the standards that he/she has learned, trying to win the approval of other teachers. Slowly he/she identifies with the authorities copying other teachers. The young teacher imitates behaviour patterns and selects those that are approved by supervisors and authorities. He/she searches and reproduces proven schemes. He/she integrates socially and professionally with other teachers. He/she imitates, copies the patterns of behaviour without complete understanding. Full adaptation to the profession relies on the knowledge, understanding and reasoning of the patterns of the teacher's conduct as well as efficient and aware use of the knowledge and skills acquired. The young teacher uses methodical patterns. In preparation for classes he/she uses ready-made materials. He/she also prepares a lot of teaching aids oneself. The young teacher consults his/her thoughts and ideas with other experienced teachers. At this stage of development the teacher learns his/her professional role and is imitative. He/she accepts worse effects of his/her educational work, e.g. when students are not focused on a lesson, the teacher says they are "mindless" or lazy.

Along with experience, first critical reflections on the teacher's own work and its effects appear. This is when the second stage of professional development – *critical realism* – begins. The teacher recognizes problems, his/her mistakes, and wants to improve his/her knowledge. He/she constantly searches for new things. He/she attends postgraduate courses, professional trainings and workshops to get better professional qualifications and competence. The teacher looks for new innovative solutions at work. He/she wants to know more and is very critical of his/her professional achievements and open to exchange their experiences with colleagues. He/she shares his/her ideas and problems with other teachers trying to solve them together. Also, he/she invents "something" new, mainly teaching aids for current lessons. The teacher notices that teaching is not only copying ready-made scenarios. He/she tries to use newer teaching methods. He/she also participates in demonstration classes conducted by colleagues and then analyses and evaluates them.

In *professional subjectivity* the teacher deepens professional knowledge and skills, which leads to self-control. In his/her work the teacher takes into account pedagogical guidelines as well as the needs and capabilities

of pupils. He/she notices ambiguities and contradictory solutions. He/she is characterized by a high independence of thought. The teacher continues to improve his/her skills and gains new qualifications attending postgraduate studies to complete his/her theoretical and practical knowledge. He/she consults his/her knowledge and practical activity with those who he/she believes have reached a higher stage of professional development. He/she gains new knowledge, applies it in practice and checks its results. The teacher uses his/her knowledge consciously. He/she has wide pedagogical and psychological knowledge, as well as the knowledge in the subject he/she teaches. The teacher discusses issues encountered at work, expressing his/her concern. His/her attitude to convention is very critical and he/she seeks liberation. He/she knows the secrets of the teaching techniques, which he/she often manipulates, adequately to the situation. His/her requirements towards oneself become higher. The teacher has strictly defined goals for which he/she selects the most effective course of action and obtains necessary information for it. In this way the teacher slowly moves towards professional creativity because he/she starts to introduce and implement own ideas, teaching methods and class activities that are more effective to achieve the goals. When teaching he/she is flexible, i.e. the teacher improves the teaching process by changing the order of the content, resources, forms and methods of its implementation, modifying the activity of the teacher and students. Through his/her work the teacher tries to develop, improve, update their knowledge, independently studying the literature. He/she develops professional competence expanding his/her psychological, pedagogical and educational skills. The teacher is active in the school and the closest environment, organizing school events, trips, etc. He/she tries to solve problems, especially teaching problems, in a creative way, runs open classes for teachers, parents, apprentices, helps younger teachers. He/she has the courage to confront their knowledge and practical solutions with experienced teachers. He/she is open to new ideas and implements them wisely. With great success the teacher correlates various fields of education, paying particular attention to the personality development of the pupils, promoting good and showing its attractiveness as well as the need for realisation. In his/her professional activity the teacher combines transferring and integrating knowledge with assisting the students in their quest to good, beauty and truth.

In the final stage of *non-conformism* the teacher reviews and amends the measures of influence in order to obtain perfection. He/she develops tools and solutions to improve efficiency of own work and the creativity of students. The teacher is often troubled and dissatisfied with the achieved results, but still emotionally and intellectually stable. He/she feels the need

for professional self-realisation. He/she thinks intuitively, analytically and heuristically. Both internal and external motivation dominate. The teacher has a positive self-image and positive self-esteem. His/her level of pedagogical creativity is mature. The teacher works out issues for about ten years. His/her teaching methods are established. His/her pedagogical creativity is of personal type and is based on performing individual abilities in a specific way. The teacher brings into existence new, original, unique innovations, tools, solutions. He/she tries to transform the given reality according to his/her own concepts. Creativity is noticeable in a climate of security and in difficult situations. The teacher is very interested in the public perception and evaluation of his/her creation.

He/she has some knowledge, but complements it by reading articles, participating in various forms of professional training. The teacher sees own mistakes and shortcomings but does not use ready-made models or methodological solutions. He/she adjusts the curricula and syllabuses to the students' needs and abilities. The teacher has a lot of ideas for more attractive lessons. He/she often achieves better results than other teachers. When being sure of his/her opinion the teacher is able to defend and justify it. He/she cooperates with the students' parents, holds parent-teacher meetings, helping them to work with children who behave badly or have learning difficulties. The teacher follows the recommendations from psychological – pedagogical counselling centres. He/she lowers the requirements adequately to the centre recommendations. He/she adjusts the educational requirements described in the curriculum to individual abilities and needs of the students. The teacher creates and implements his/her proprietary curriculum.

He/she introduces own innovations. The creative teacher holds full moral and professional responsibility for the innovations, its effects and conclusions. Professional responsibility is important in the course of innovative activities, formulated and verified hypotheses. The teacher must also be able to draw back if his/her innovations turn out to be harmful to children or the environment. This decision is affected by the teacher's moral responsibility. This, in turn, is connected with systematic self-assessment and self-control, which are the result of self-perception of the effectiveness of own activities in relation to the effective actions of other people in the vicinity. J. Reykowski emphasizes that self-assessment can vary, but it becomes generalized and is a constant dimension of personality. The source of self-perception is information about oneself and the opinion of other people about the teacher. The degree of divergence between a real self and an ideal self is the level of self-acceptance and the indicator of the individual's cognitive structures

integration. Those who are mentally “healthy” and function well socially reach the average level of self-acceptance. In inner-directed people a sense of control stems from the perceived situation and the properties of the individual. Situations perceived as random occur in other-directed individuals. Creative individuals set themselves goals and implement the curriculum which takes into account external factors, therefore they are inner-directed. The creative motivation of these individuals is of cognitive nature because it relates to discrepancies between the actual and the ideal, creating tasks focused on a goal. Creators treat public approval as an indicator of the effectiveness of their work. Self-esteem in creative teachers is often high, due to their non-conformism, resistance to external pressure. Hence, they have a specific rhythm of work, i.e. tasks are carried out at the time of best mental concentration in isolation from external disturbances for a long uninterrupted period of time.

During professional development the teacher’s pedagogical creativity is oriented to gaining independence, i.e. becoming free from external influences. Professional development does not take place automatically. It may stop at some stage, which would be connected with the development of individual pedagogical competence and commitment to work. It requires favourable internal and external situations. An individual may stop at some point of development, especially if it turns out that the level of professional competence of the teacher meets the expectations of the school. If the level of the teacher’s competence is advanced and exceeds the expectations of the professional environment it becomes a nuisance because it requires internal and external stimulation. The teacher’s professional development is conditioned by: 1) size of acquired knowledge and its usage in teaching practice; 2) the expansion of own experience; 3) the teacher’s expectations towards the profession; 4) professional adaptation; 5) non-standardness and non-precision of educational situations, and also 6) empathy, communicativeness in interpersonal contacts and owing to this 7) wide and deep self-assessment, self-control and pedagogical creativity.

Reflections instead of conclusions

The teaching profession does not impose rigid rules of conduct. The work of the teacher is creative and involves reflection, a constant search, adapting requirements to the capabilities and needs of children (Kwiatkowska 2008). All the time the teacher inspires and supports the student’s personality. Also, the student creates situations in which the teacher must prove his/her resourcefulness, which is one of the many features of creativity. This profession requires specialised knowledge from teachers in the subject they

teach, thorough pedagogical knowledge as well as continuous improvement of skills through vocational training and self-study. Today, the explosion of knowledge, the increased flow of information, use of media in classes (by the teacher and students) forces the teacher to devote more time to prepare for classes and continuous self-study. Pedagogical creativity, which is necessary in cyberculture, brings satisfaction with oneself and one's work, which can be seen in the teacher's serenity, smiling face and involvement. The teacher's optimism, professional competence and enthusiasm for work undoubtedly contribute to a positive attitude of students to the teacher. In cyberculture pedagogical creativity in the teacher's professional development brings kindness, liking and gratitude of their students. By self-observation, self-reflection, self-improvement the creative teacher becomes mature – a teaching master.

Pedagogical creativity appears on the third and fourth stage of professional development, that is critical realism and non-conformism. Pedagogically creative teachers are individuals of non-conformist and heuristic qualities with great knowledge, which they use practically, striving for effective pedagogical work. The professional development of the teacher is mainly motivated by self-satisfaction, coming from gaining new skills, the awareness of own development, improvement of teaching skill (Szempruch 2013). The need and the capability of sympathizing, interpenetrating, providing support to students, empathy, the desire to conform, harmony and unity with the pupil are of great importance in teaching profession and development. J. W. Dawid calls it the love of human souls, which allows the human being to go beyond oneself into the inside of another human being – the student. Each new student is a new challenge for the teacher. Apart from the love of human souls the teacher needs, according to J. W. Dawid, to pursue excellence, and – according to Z. Mysłakowski – parental instinct, “emotional adaptation”, co-experiencing, co-feeling, expression of feelings through gestures, facial expressions, and – according to J. Legowicz – open attitude and intonation of verbal and non-verbal messages (Dylak 1995; Kwiatkowska 2008).

In the course of professionalization the teacher develops his/her pedagogical creativity by gaining new, distinctive competencies (*fit with resources*). The consequence of the professional development of teachers should be a higher quality of their professional activity (*marketing capability*). Professional development, related to the teacher's pedagogical creativity (which I have tried to show above) should be set to shape pedagogical culture, share knowledge with the external environment and within the educational institution. This means that on the one hand, the teacher should use his/her

gained new skills for the good of the student, the institution and the quality improvement of professional activities. On the other hand the teacher should demonstrate a willingness to transfer new knowledge to other workers in accordance with the concept of a learning organization (*rent appropriation*).

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FROM THE TEACHER'S SCHEMA TO THE TEACHER'S PEDAGOGICAL CREATIVITY IN CYBERCULTURE

Keywords: the teacher, pedagogical creativity.

This article discusses changes in external conditions of the functioning of contemporary man, including the teacher. The author pays attention to the changes connected with the development of media and electronic devices used for the processing of information and for communication. What is more, new information and verified knowledge is constantly added. School, still a traditional place of their transfer, cannot ignore these new knowledge sources. They are accessible and used by pupils, to whom operation of devices does not pose difficulties. With the same, contemporary teachers are expected to raise their qualifications in the field of cyberculture through professional improvement and self-education.

Numerous researchers of contemporary school and teachers pay attention to the aspect of pedagogical creativity which is an indispensable element of the teacher's work. Pedagogical creativity appears at the third and fourth stage of professional development, the so called critical realism and non-conformity. A pedagogically creative teacher is a person with vivid imagination, a large body of knowledge (using this knowledge in practice for effective pedagogical work), and non-conformist, heuristic qualities.

Marzenna Magda-Adamowicz

OD SCHEMATU DO TWÓRCZOŚCI PEDAGOGICZNEJ NAUCZYCIELA W CYBERKULTURZE

Słowa kluczowe: nauczyciel, twórczość pedagogiczna.

Niniejszy artykuł traktuje o zmianie warunków zewnętrznych, w jakich przychodzi funkcjonować współczesnemu człowiekowi, w tym nauczycielowi. W tekście zwrócono uwagę na ten obszar zmian, który związany jest z rozwojem mediów i urządzeń elektronicznych, służących do przetwarzania informacji i komunikowania się. Ponadto w niezwykle szybkim tempie przybywa nowych informacji, ale i sprawdzonej wiedzy. Szkoła będąc w dalszym ciągu tradycyjnym miejscem jej przekazywania, nie może ignorować nowych źródeł wiedzy. Są one dostępne i wykorzystywane przez uczniów, którym obsługa urządzeń nie nastęrcza większych trudności. Tym samym oczekuje się od współczesnych nauczycieli ciągłego podnoszenia kwalifikacji w zakresie poruszania się w cyberprzestrzeni poprzez doskonalenie zawodowe i samokształcenie.

Wielu badaczy współczesnej szkoły i nauczycieli zwraca uwagę na aspekt twórczości pedagogicznej, która jest niezbędnym elementem w pracy nauczyciela. Twórczość pedagogiczna pojawia się na trzecim i czwartym etapie rozwoju profesjonalnego, tzw.: krytycznym realizmie i nonkonformizmie. Twórczym pedagogicznie nauczycielem będzie osoba o bogatej wyobraźni, dużym zasobie wiedzy, którą wykorzystuje w praktycznym działaniu, dążąc do efektywnej pracy pedagogicznej oraz ma cechy nonkonformistyczne i heurystyczne.