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INNOVATIVE COMPETENCES IN PROFESSIONAL¹ AND PRIVATE LIFE

Key words: innovative competence, innovation, creative competence, personal and professional development.

Abstract: The study raises the issue of innovative competences, which are significant in the light of modern person's functioning in a changing environment. The categories of innovation, innovative competences were defined. The need of shaping the competences, both in private and professional life was shown. The role of school education in the process of shaping creative and innovative competences was determined.

Innovation as a category

Innovation is a broad conceptual category and it includes different concepts of the notion. „[Innovation] is about creating new ideas to solve problems” (Gallo 2011, p. 2). In a social life, there is innovation spelt with a lowercase „i” and the one spelt with a capital „I”. Innovation with a capital „I” concerns culture phenomena as discoveries, inventions, e.g. the Internet or a barcode. Still, there is also innovation spelt with a lowercase „i”. And this one makes our lives better thanks to implementation of small, continuous improvements which help us deal with life, and improve learning and working processes.

Innovation is often treated as creativity's synonym. As M. Brzeziński claims, „Innovation is an ability of stimulating technical and organisational innovations; it is a consequence (from the time perspective) and a result of processes of creativity; that is, taking advantage of a creative effect in practice” (Brzeziński 2009, p.36) [*Own translation from Polish*]. The table mentioned below provides definitions of these two different notions.

¹ When we speak about professional life, development, improvement, skills, qualifications, practice we are referring to adult professional life, development, improvement, skills, qualifications, practice and consequently we are referring to adult private life

Table 1. Comparison of features of the particular analysed areas

Creativity	Innovation
Rather a mental feature, descriptive, like a unit of thought (inventively, creatively, using one's imagination, out of the box, non-schematically etc.)	Rather a behavioural feature that describes an individual's behaviour (focusing on changes, implementing novelties, etc.)
Rather disposition (thus a certain capability)	Rather an ability (thus something which is relatively easy to be objectified and evaluated, something easy to be learnt)
Rather an „autonomous” feature which is not created as a result of interaction with environment and under its pressure	Rather a reactive feature (the one that is shaped under the influence of certain circumstances, as the result of reflective monitoring of chances and threats, as a reaction to specific challenges, etc.)
Rather a feature – a part of autotelic (direct) thinking with an object of a value „for its own sake”	Rather a feature – a part of instrumental (indirect) thinking, about ways/tools to achieve a goal
Rather a non-situational feature (showing itself in different contexts, not necessarily and solely in professional and „task” situations)	Rather a dimension of professional qualifications and skills
Rather an innate quality (at least according to common understanding)	Rather an acquired or „acquirable”/learnt trait (according to common understanding)
Rather a quality that is potentially „dissociating” and excluding	from „the group of the social and cultural normals”, rather a socialising quality, including into a group, bond-making
Rather a quality connected with an individualistic orientation	a feature rather related to focusing on cooperation

Source: R. Drozdowski, A. Zakrzewska, K. Puchalska, M. Morchat, D. Mroczkowska, *Wspieranie postaw proinnowacyjnych przez wzmacnianie kreatywności jednostki [Supporting proinnovative attitudes through strengthening the creativity of individual]*, PARP, Warszawa 2010, pp. 20-21.

From the education point of view, the important fact is that innovation is a quality which can be shaped, and which can be used not only by an individual but also by groups, human organisations or even the whole societies. It can be successfully shaped from the early years and developed throughout the life course, taking different related conditionings into consideration. The attempt to perceive innovation multi-dimensionally was made in the studies. The analyses offered to perceive innovation from the integral perspective. It was assumed that innovation is a continuous process and the result of appearance of new

personal and/or social visions that show themselves in actions of an individual as innovations and become established in a cultural dimension as imitations (Przyborowska 2013).

The notion of „innovation” is often found coupled with other terms which offer its further determination, e.g. „adaptability” and „innovative competence”, „innovative dynamism”. A general definition of innovative adaptability of all sorts of systems was formulated and implemented into Polish literature on the subject by Z. Pietrański in the 70s. The mentioned author understands innovative adaptability as relative flexibility in undergoing innovations; that is, changes – triggered by factors outside a system or within a system – which are perceived as signs of progress in the light of certain criteria. Innovative adaptability can be subjected to gradation from a null value to a maximum value (Pietrański 1970). Adaptability determines a human ability of adapting to changes in the environment. Still, it is human adaptation to changes in the environment by way of reactive principle. According to psychologists, adaptability is the most basic way of regulation of behaviour in the situation of change. It is not connected with a creative transformation of reality according to the belief that adaptability does not include a creative activity and it is of more natural and primary nature.

Z. Pietrański also uses the notion of innovative competence, which is understood as, relatively, the most direct preparation for implementing innovations, based on acquiring of practical experiences and proper scientific knowledge. The competence understood in that way is of narrow range, limited to the individual's knowledge and skills. However, in its wider range, it can also include human attitudes promoting innovations, values, needs and gifts. The author refers innovative competence solely to human individuals (Pietrański 1970).

What is more, Z. Ratajczak mentions innovative competences, defining them as human abilities in the scope of acquiring new elements of broadly-taken knowledge and improving one's skills of its gathering and using. This extends the notion to a collective subject; that is, the author discusses organisation's originality, its competences in the scope of acquiring innovations and implementing changes (Ratajczak 1980, p.41).

To sum up, innovative competences are related to preparation for implementation of innovations, knowledge of and attitudes towards innovations, and commitment in their implementation.

Innovative competences in human life

Nowadays, there is a very clear ideology propagating creative attitudes and behaviours, as well as, presenting innovation as a need and value of a modern person. The education system at every level becomes responsible for creating and strengthening these behaviours from the early years of life. Shaping an

innovative and creative personality, well-adjusted to functioning in the modern and future changing world, becomes one of the main tasks of education.

A human being is a starting point for the analysis of all innovation processes; creating (and producing), implementing and acquiring innovations. The final result of acquiring innovation by individuals through entire lifespan and societies is dependent on human needs and attitudes. The success of individuals and organisations, in which they live and work, as well as, of the whole economy is dependent on innovative competences of people. Changes, which continually occur in a human being and the surroundings, imposed constant decision-making and assuming an active attitude. The decisions concern taking up actions for, creative participation in or eliminating unpleasant experiences in connection to necessary adaptation to the surroundings. Changes in the surroundings are dependent not only on human activity and attitudes (towards changes) but also on alterations of the course of life, and an inner change that is the change of oneself (self-creation).

Accumulation of challenges stemming from different realms of social life obliges various social institutions and people functioning within these institutions to reformulate ways of reacting to the changes in internal and external environment, which is subjected to fluctuation. Organisations and people within the organisations are forced to adapt themselves to increasing complexity of both external and internal surroundings through the change of their parameters of functioning. They are not only forced to adapt to new conditions, but also to react to them in advance; they have to anticipate all the changes; that is, show innovative competences.

Innovation of individual can be defined as „a set of inner and acquired predispositions of individual to create and implement changes leading to improve effectiveness of one's actions. Among these predispositions, there are: learning skills, ability and willingness to implement changes, ability of creating, implementing and adapting innovations (including the ability of accepting changes from the environment), as well as, susceptibility to the influence of external factors conditioning these behaviours” (Drozdowski et al. 2010, p. 20) [*Translation from Polish*].

On the other hand, creativity is defined as an ability to ask a question concerning a different and better way of doing something, and as an ability of projecting broadly-taken changes, both in private and professional life. And innovation is determined as realisation of creativity. A specific link between creativity and innovation is a proinnovative attitude (Drozdowski et al. 2010, p. 20).

A human being, as a subject of changes, finds himself/herself in the focus of attention when creative and original behaviours are required. Certain psychological mechanisms and regularities that control human actions and influence his/her functioning in the culture, a social group, are worth discussing here.

An innovation situation can have a positive, negative, or neutral influence on a human being. Creativity is often perceived as a condition essential for innovation; still, it is not a sole condition since not every creative thinking or action results in innovation. The proinnovative attitude shown by a human being is connected with a lively interest in realisation of creative ideas, and it is related to the readiness to take a part of or full responsibility for operationalisation of a project and its implementations.

The proinnovative attitude, as an individual quality, is characterised with openness to new solutions that is shown; among others, with: the ability to learn, readiness to take risk, criticism of the existent patterns and standards of conduct. On the other hand, the anti-innovative attitude, as an individual feature is characterised by: unwillingness to new solutions and to take risk, focus on well-known organisational patterns and habits, considering certain aspects when thinking of an organisation instead of holistic approach, focus on subordination, no focus on autonomy (R. Drozdowski et al. 2010).

These are two opposing attitudes; still, the range of approach to changes can be wider: from innovative attitudes to resistance to change. The attitudes towards implemented changes can be strong, weak or moderate. The negative or positive ones can take a form of stereotypes or even prejudices resistant to any alteration, which can be strongly connected to a human reaction to a certain innovation. Z. Pietrasiński distinguishes three types of human attitudes towards innovations:

- 1) conservative attitude that is characterised with reluctant and even resistant attitude towards innovation. Its basic expression is suspicious scepticism towards offered changes and commitment in every action that would hinder, not facilitate a process of innovation's implementation. The source of this behaviour is said to be a specific fear or anxiety of losing one's authority for the benefit of people who are better prepared for changes, and a fear of acquiring new and surely difficult information;
- 2) receptive attitude; that is imitative attitude, which is; first of all, shown with a positive approach to changes and willingness to be involved in implementation of established innovations. If an individual shows the initiative of searching for patterns of innovations then it is an active receptive attitude. On the other hand, when the reception of specific patterns of innovation requires the influence of any external factors, than it is an anticipative attitude;
- 3) pioneering attitude; the most positive towards any changes. It shows itself in independent seeking or initiating totally new, separate and original solutions (Pietrasiński 1970).

When analysing human adaptation to change, one must take into consideration that; from the psychological point of view, every person shows relatively less or more considerable adaptability; that is, the ability of adapting to changes in the environment and extreme modifications of inner structures or processes (Ratajczak 1980, p.125). Every person shows different innovative competences.

Professional and personal development

There is a strong relation between professional and personal dimension of self-development „Professional self-development supports personal development. And vice versa – aiming at shaping one's own „self” constitutes a driving factor that directs the processes of professional improvement” (Schulz 1989, p.80) [*Translation from Polish*]. Still, the issue of individual self-development is worth discussing here; especially, as it is neglected in the process of education. Even though a professional practice of many people supports personal self-realisation and broadens their knowledge on other people and the world, it is considerably diversified and it is often a side effect of professional or life practice since it is spontaneous; therefore, it is often accidental and fragmentary. A Renaissance person took interest in science and works of art, and a person of new Renaissance aims the creative actions at a new area, available almost to everyone, that is, improvement of own conduct and personality, supporting improvement of others. A new element here is focusing on personal development according to the idea of joining two competences: professional and existential ones. The existential competence includes; among others, private and family life. It means using proper knowledge and a way of thinking with responsibility similar to the one occurring in difficult professions (Pietrasiński 2008.). Unfortunately, a common belief that we already have this competence is strongly hampering. The need of controlling one's development after the adolescence period is mentioned by Z. Pietrasiński in his works. A person aware of his/her development, co-creator of the course of life, acquires a new competence – biographical one. It is understood as an ability of co-creating one's own life and development and supporting development of others in a more and more systemic way. This includes both the used knowledge and attributes of thinking. The basic components of the biographical competence are: self-creation knowledge, which supports developing and directing one's life, social knowledge (scientific and common one), individual knowledge and biographical thinking. The biographical competence is shown in thinking and acting with attributes connected with wisdom, and it can be shaped, as well as, importantly, taught. On the other hand, self-creation knowledge is information facilitating becoming an expert of self-development. The source of this knowledge are significant people, own experience and written sources. Obviously, the self-creation competence; that is, co-forming of oneself, can be spontaneous, sometimes incidental (also in difficult, extreme situations), but also it can assume an intentional form. Possibilities and forms of intentional self-creation's development are various – from formal forms (school, extraschool) to individual work of a person on oneself through entire life , learning with others and from others.

Education preparing a person to independent learning gives great possibilities of using vast literature sources within different domains, including; especially,

social sciences, and it can facilitate decision-making based on verified information. „Thanks to this fact, both young and mature person can prepare himself/herself to solve different life problems in a better way than it was possible in the past on the basis of common knowledge” (Pietrasiński 1990, pp. 144-145) [*Translation from Polish*].

Self-creation aspirations result from external situations and internal factors – subjective ones. The surroundings of a modern person is becoming more and more complex, and challenges, as well as, new tasks imposed on a person pile up almost every day. Therefore, a great self-creation effort is needed to cope with the situation since „self-creation is a sort of aspiration to restore unity and continuity to our experience. This includes processes as: pursuing self-knowledge, effort of self-determination, pursuing maintenance of personal integrity and identity, and; finally, pursuing independent control of own development” (Schulz 1989, p. 79) [*Translation from Polish*].

Education and innovative competences

In order to shape innovative competences, the education system has to consider tasks, which should be executed already in an early stage of school education and continued later, among employees and employers. The modern organisations need active, flexible and creative people. A manager of the future should be characterised with the skills of systemic thinking, acting in multi-cultural surroundings, being ready to continual learning, and positive personal qualities. The key qualities of a person in the era of innovation are; among others,: empathy, which should complement logical and critical thinking, ability of narration, designing, creating entireties, ability of having fun, finding the meaning. What is more, the abilities of verbal and nonverbal communication, dialogue and discussion, open-mindedness in relations to oneself and others are important. Innovative competences are also shown in resistance to stress and knowledge of techniques of coping with difficult situations.

In order to fulfil the new tasks, the modern education system has to change itself. It needs to promote innovative, creative education and teaching. Education should be more and more education for creativity, which assumes shaping people capable of developing, improving the previous resources of social experience in its all ranges. It should abandon teaching for replication for the benefit of teaching for innovation. According to R.Schulz, this general vision of teaching for innovation includes several detailed ideas, dependent on which domain of individual experience it will be referred to:

- education for culture-forming activity (forming of creative and innovative participation in the culture);
- education for creative work (education of people for creative participation in professional work);

- education for social change (shaping the abilities of demonstrating innovative behaviours);
- education for self-development (education for self-creation, self-development, for autonomous controlling one's life and oneself) (Schulz 1996, pp. 46-50).

The idea of education for innovation determined in that way has a great social justification of changes in individual's location in the world, and psychological justification— of new aspirations of people who would like to be masters and creators of their fate in wider and wider range, both in their private and professional life. This brings about changes in education institutions, which, in order to perform new functions, have to modify the education reality and become a place of innovative, creative education that imply implementation of innovations to teaching thinking and acting ((Schulz 1996, pp. 46-50). The beginnings of these actions lead us through different education paths. These lead us towards alternative education, where islands of the new appear in the sea of the old, that is, new streams, ideas of education, initiatives, new facilities, and creative teachers, principals and students. These lead to practical usage of psychology and sociology of creativity. These make education studies and the didactics of creativity significant.

One of the basic aims of education is teaching a doer who is capable of taking up important and innovative actions; who is not only capable of adapting himself/herself to a local environment, but also changing this environment. Education for innovation, education for creativity is mainly of practical, training nature, as contrasted with traditional education of more theoretical nature. Creative education (for creativity) should establish a positive attitude towards taking up well-considered and reasonable tasks, also in the context of full responsibility for these tasks. Creative education is possible solely thanks to interpersonal relationships, meetings and exchanging thoughts, creating „live knowledge” (Nalaskowski, Kraków 2002). A school that develops a teacher creatively should provide him/her with small groups of students that would enable him/her to talk to each student, his/her full presence at school, as well as, substantial freedom and independence. On the other hand, a creative school should provide a student with: dialogue, contact with other person, diversity of interpretation, magic of creation and cognition, and opportunity to treat la life as a task (Nalaskowski, 1990, pp. 5-16).

In these conditions, the beginning of development of innovative competences is possible, and these competences can be developed and used in the further private and professional life.

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Kompetencje innowacyjne w życiu prywatnym i zawodowym

Słowa kluczowe: kompetencje innowacyjne, innowacyjność, kompetencje twórcze, rozwój osobisty i zawodowy

Streszczenie: Artykuł dotyczy kompetencji innowacyjnych, które są istotne w świetle funkcjonowania współczesnego człowieka w zmieniającym się środowisku. Zdefiniowano w nim pojęcia: innowacyjność, innowacyjne kompetencje. Ukazano potrzebę kształtowania kompetencji innowacyjnym zarówno w życiu prywatnym, jak i zawodowym. Zaprezentowano rolę edukacji szkolnej w procesie kształtowania kompetencji twórczych i innowacyjnych.

Innovative Kompetenz im privaten und beruflichen Leben

Schlüsselwörter: Innovative, Kompetenz, Innovation, kreative Kompetenz, Personalentwicklung, Berufsentwicklung

Zusammenfassung: Im Artikel wird die Frage der innovativen Kompetenzen berührt, die im Lichte des Lebens des gegenwärtigen Menschen in sich wandelnden Umgebungen relevant ist. Es wurden darin solche Begriffe wie

Innovation und innovative Kompetenzen definiert sowie das Bedürfnis dargestellt, die innovativen Kompetenzen sowohl im privaten als auch beruflichen Leben zu gestalten. Es wurde auch die Rolle der Schulbildung bei der Formierung der kreativen und innovativen Kompetenzen beschrieben.

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