Małgorzata Kabat

Adam Mickiewicz University in Poznań

The art of building teacher's skills and tools

*Acquire new knowledge whilst
thinking over the old, and you
may become a teacher of others*

Mark Twain

ABSTRACT

The concept of the art of building teacher's skills and tools is seen as a potential for proficiency in didactic and educational activities. Individual predispositions conducive to teachers' predictable and/or creative activities are demonstrated. R. J. Sternberg's investment theory of creativity, which fits into the phases of teachers' professional development, turns out to be helpful in forming their skills and tools. In each phase, both methodological models and creative solutions are sought, and as such, they are discussed by means of theoretical divagations and selected research findings.

Key words: teacher, art, professional skills and tools, pattern, creativity

INTRODUCTION

The present-day technological development and the change of conditions and style of the life of modern societies affect education. The differences appearing among people lead to conflicts, to corruption of universal models, as well as to manifestations of disrespect for the work and conduct of others. The

intensifying negative social phenomena are shown by the mass media, which “fulfil an educating function by providing opportunities to develop recipients’ personalities, but they may also become a tool of manipulation in the hands of political forces”. The more and more visible role of the mass media in replacing teachers in their professional duties causes “a need to introduce thorough transformations in the sphere of education”, as I. Wojnar (1996, p. 15) states. It is recommended to develop appropriate solutions in education and in the teaching profession. This results in the requirement for building a new image by teachers, as well as for providing them with new skills and tools, which would influence their commitment and educational activity. Implementation thereof would be instituted in the wake of the art of construction teaching skills and tools, where art is understood as “an ability to do something proficiently, skilfully and masterfully” (*Współczesny słownik ...*, 1998, p. 391). This explanation may, in particular, refer to teachers’ professional work, as they prepare pupils to the functioning in the chaotic conditions of modern societies. A schematic and/or creative activity may be demonstrated, depending on teachers’ predispositions, pressures and expectations, but, most importantly, they are a consequence of skills and tools developed for years. Just like teachers themselves, they are subjected to improvement meant to ensure effective education. They make it easier for educators to find solutions to problems experienced during their day-to-day activity.

TERMINOLOGICAL CONSIDERATIONS

Understanding the subject matter of teachers’ professional skills and tools requires some explication. This concept is usually associated with one’s place and position in a given institution or company (*Współczesny słownik ...*, 1998, p. 499). A similar interpretation can be found in a publication by K. Duraj-Nowakowa. She defines teacher’s workshop as “a set of specific areas equipped with devices and didactic tools. These are permanent, changeable and portable workstations (places for activity) used to organise various forms of activity. It is also appropriately developed documentation to be used in organising the didactic process and teacher’s own professional improvement” (Duraj-Nowakowa, 2000, pp. 35–38). J. Kozłowski suggests an analogous definition of the term, interpreting it as “a description of the course of teacher’s peda-

gological activity, realised in accordance with external (material and organisational) and internal (psychosocial) conditions, which are essential for completing tasks or other undertakings" (Kozłowski, 1966, p. 9). What can be noticed in these terms is that, on the one hand, external conditions of an educational institution with specific equipment and location play an important role, and, on the other hand, teacher's disposition and abilities used to complete didactic tasks in given circumstances are significant.

The explanations presented above show that the factor on which the creation and development of skills and tools largely depend is teachers themselves. They gather deliberately selected procedures including behaviour, working methods, legal, procedural and organisational documents. What helps to make decisions on forms of skills and tools is teacher's knowledge and abilities gained during studies, training periods and professional experience. It builds up in the wake of undertaken duties described in "Karta Nauczyciela", "Dziennik Ustaw", "Monitor Polski" and "Dziennik Urzędowy MEN". Regulations included in these documents accompany teachers in their day-to-day activities. Daily life, as J. Brach-Czaina writes, becomes "obtrusively present and at the same time imperceptible" (Brach-Czaina, 1999, p. 85). It is a combination of "[...] routine and spontaneity, commitment and indifference" (Witkowski, 2003), in which teachers implement the curriculum, choose didactic methods, forms or measures, evaluate, classify, examine and facilitate pupils' promotion to the next year, as well as solve problems, experiment, obey rules and responsibilities. The amalgam of teachers' duties either yields homogeneous activity in accordance with commonly accepted rules or reveals creativity enabling to strive for finding optimal solutions leading to the best possible results.

The use of routines and/or creative styles results from skills and tools which are a set of qualifications, abilities and professional habits, as well as hints from colleagues or expert literature. Information gathered from the abovementioned sources becomes a basis for planning and organisational documentation, such as annual subject plan containing monthly, weekly and daily distribution of material. It includes scenarios of didactic classes, extracurricular classes, schedules of occasional, special events, tasks assigned both to the teacher and to pupils (Palka, 1997, pp. 46–47).

Materials developed by teachers require the use of certain patterns and creative solutions. Most frequently, they are utilised by open-minded and inventive educators, who select appropriate tools and methods meant to present pupils with teaching content, subjected to criticism, evaluation and further

use (Wardyńska, 1999). Introvert and passive teachers, in turn, use known and accepted methodological patterns. With time, these recurrent models become more and more monotonous, permeated with mutual negative attitudes between teachers and pupils. The intensifying tension and frustration cause professional complications. Such emerging difficulties should be a signal for teachers, as A. Schultz (Schultz, 2008, pp. 168–169) points out, to make decisions about changing their didactic conduct.

Overcoming the mundane perception of school commonness in a wise way must be accompanied by the reconstruction of teachers' deep-rooted ways of thinking and functioning. At first, neutralisation of their unfavourable approach is a prerequisite, so that theirs and their pupils' verbal and non-verbal responses improve. Beneficial changes are also related to modification of teachers' mentality, which conditions different behavioural patterns. Teachers' skills and tools may come in handy, as they fulfil supporting functions, uniting and conditioning the best possible results based on optimal relations with pupils. In other words, teachers' skills and tools should constitute a factor inspiring their development, since they are a complex micro-world of responsibilities, professionalism, knowledge, pedagogical and life skills. It requires improvements and systematic modernisations in order to provide the most advantageous conditions.

PATTERN AND CREATIVITY IN TEACHERS' SKILLS AND TOOLS

Transformation of teachers' skills and tools is instituted within years of professional work. The time enables implementation of whatever solutions teachers select for their designed activities, what methods and forms of working connected both with a given patterns and creative solutions they apply most often, how they seek and choose tasks for lessons, how they predict and resolve difficult situations, how they evaluate their activities and those of their pupils, what results they obtain, what short- and long-term objectives of pedagogical work they set. The questions formulated above appear at different moments in the didactic process, which is implemented in accordance with phases of professional development, i.e. (Kobyliński, 1984):

- “the phase of methodological models: in which teachers seek and reproduce proven patterns, guidelines, model lesson plans and tests;

- the phase of creative reflection: referring to reflection on one's own professional work, methods in use and achieved results. On the basis of observation of one's work, head teacher's, teacher-adviser's or consultant's remarks, teachers notice their own mistakes, gaps in knowledge, and try to eliminate them. In order to do so, they select interesting and alternative ways;
- the phase of self-knowledge and self-control: connected with broadening knowledge of psychology and one's own reflection on the job, through which better self-knowledge is achieved. Broadening thereof, together with the development of self-control is conducive to professional perfection;
- the phase of creativity called a phase of innovativeness: it manifests itself in innovative attitudes, in aiming for more and more complete understanding of reality and pupils, seeking and applying the means of educational interactions, thanks to which teachers obtain the best, socially desired effects, resulting from modification of their own ways of conduct (Kobyliński, 1984, p. 249).

At each phase theoretical and practical solutions co-exist. They are enriched with teachers' creativity and effort, affecting their career path, professional skills and tools. Being based on the so-called "*common sense*", as K. Czarnecki concludes, cannot be satisfactory for teachers (Czarnecki, 2008, pp. 11–12). Solid bases of pedagogical and psychological knowledge and professional development together with further education constitute a good foundation for creating conditions and the right atmosphere conducive to self-creation as well as that of other people.

R.J. Sternberg and T. Lubart's (1999, pp. 8–10) investment theory of creativity appears to be a tool useful in building teachers' professional skills and tools. According to this concept, such factors as knowledge, intellectual skills, styles of thinking, personality features, motivation, social context (environment) all interact. The most important factor, decisive about the effects of teachers' creative activity, according to R. Sternberg, is their ability to utilise their potential. The author points out that the potential also influences decisions about the direction in which the formation of teachers' professional skills and tools proceeds, determined by meta-components that are needed in the process of planning, ordering, selecting, controlling, information processing and engaging teachers in specific actions. As the researcher emphasises, the meta-components are connected with knowledge-acquisition components

and performance components. All of them fall within the range of the sub-component theory, which is connected with:

- **practical context**, in which teacher's intelligence makes it possible to adapt to the school environment and transformations thereof. Such practical intelligence is a result of gained knowledge and practice of didactic activities implemented in a given environment;
- **experience context** connected with the creative aspect where intelligence is a property that enables to effectively solve tasks through information-processing in one's mind. It includes problem-redefining, breaking or questioning stereotypes, readiness to "sell" ideas to others, pass values on to others, overcome barriers to creative activity, encourage others to take sensible risks, generate new ideas, initiate co-operation, show tolerance, be able to look at things, phenomena from different points of view (Sternberg, 2005);
- **analytical thinking context** understood as the teacher's general intelligence. It is connected with the organisation of cognitive processes, oriented towards exploring, comparing and evaluating information. The internal mechanisms of cognitive processes refer to the assimilated and already gathered information faithfully presenting facts and the reality. Teachers use them in their every-day activities, applying a given type of thinking to efficiently solve problems, find similarities, differences, perform analyses, syntheses, evaluations and criticism of the presented information in order to find solutions to tasks appearing in the curriculum.

Activities designed by teachers may be oriented towards implementation of a selected aim corresponding to traditionally understood intelligence. Studies by G. Dryden and J. Vos confirm this, stating that traditional teaching and learning are based on analytical and logical intelligence (2003, p. 245). These intelligences facilitate the formation of a behaviour pattern that becomes established in a given teacher's professional practice. It does not fit the modern school conditions requiring differentiation of work strategies. In such a situation, it is recommended for teachers to change routine functioning to behaviour combining creativity patterns.

R. Sternberg's concept also places emphasis on the importance of modification of teachers' professional behaviour. The author writes that what is important is not only to learn the specific duties at an educational institution and to adapt to them, but also to develop an ability to achieve success there. This

happens through “balancing the functions of analytical, creative and practical ways of thinking useful in information-processing (Sternberg, Lubart, 1999, pp. 35–38). The abovementioned types of thinking should be mastered by all teachers, so that they can efficiently use them as their professional skills and tools. They are characterised, as the scientist writes, by both separation and mutual dependence and completion. Appropriate utilisation of a specific type of thinking in teachers’ skills and tools is not only connected with the organisation of didactic activities, but also with learning about one’s own resources and possibilities to influence others. This effect results from personal adaptation to the educational reality and an ability to independently introduce changes to it. This duality of teachers’ influence gives rise to complications. On the one hand, the appearing difficulties integrate with the internal mechanisms regulating human behaviour, and on the other hand, personal development understood as the prime interest becomes prominent.

The preclusive issues shown above demonstrate how complicated the nature of the profession is. These concerns overlap with the problems of humanistic psychology (Maslow, 1986, pp. 136–145), which contributes to deeper recognition of teacher’s individual constitution as a gifted and responsible person who is also passive and autocratic towards the subject of teaching and upbringing. It should be noted that every subject wants to aim for self-realisation, i.e. formation of either an open, spontaneous, curious and creative individual or an indifferent and reserved one. These are concise descriptions of extreme identities characterised by different ways of thinking, acting, fulfilling professional duties and implementing interactions with the environment (Rogers, 1959, p. 196).

Regardless of the types of people teachers are, they create skills and tools which make them realise what abilities and opportunities they have, what successes and failures they achieve, what effort they put into every-day activities, what knowledge they hand over to their pupils: declarative knowledge based on patterns or procedural knowledge taking into consideration seeking thereof, as H. Kwiatkowska (2008) writes. The questions formulated above lead not only to providing answers, but also to teachers reflecting on their own skills and tools. The reflection allows revising the phases of teachers’ professional development, which are determined by their individual mentality and strategy for every-day behaviour. Therefore, teachers should attach great importance to learning about their own biographies crystallised in the conditions of educational environment and experience gained there. It conditions the

course of cognitive processes, understanding of the world and professional functioning. However, such researchers as P. Berger, T. Luckman (2010), B.J. Luckman (2007, pp. 8–12), J. Trzebński (1994) or D. Klus-Stańska (2012) notice that fulfilling duties in a given environment happens through collective, rather than individual social processes. In this context, execution of teaching tasks and self-knowledge are, as J. Uszyńska-Jarmoc writes, “*second hand*”, being scholastic knowledge which cannot be passed on and developed since it carries the features of the author” (Uszyńska-Jarmoc, 2008, p. 179). Therefore, teachers’ social and individual knowledge matters. The two types are complementary sources of information for teachers, as M. Nowak states. Social knowledge expresses tradition connected with experience of a collective nature, whereas individual knowledge has a subjective tone limited to specific cases and conditionings (Nowak, 2010, p. 38). It is used in educational institutions, within families and to influence others. It is based, among other things, on social norms, customs and worldview. According to J. Majka, it synthesises “the observational predicate with the observational subject” (Majka, 1981, p. 108), enriching teachers’ practical knowledge and the contexts of their functioning. It is supplemented by their pedagogical reflection, which is based on self-observation and on educational phenomena that build teachers’ identity later on (see: Kwiatkowska, 2005).

The mutual influence of school and outside-school environments conditions, as R. Sternberg puts it, the formation of an attitude of a teacher-globalist and a teacher with a local attitude (Stenberg, Zbang, 2005, pp. 245–253). Teachers-globalists are able to solve problems in unclear or ambiguous situations with scant information, which does not pose an obstacle for creating original and non-standard educational solutions whose basis is creative, divergent thinking. In contrast, teachers with local attitudes need coherent information full of details combining, as J.P. Guliford would say, with convergent thinking (Guliford, 1978). R. Sternberg, in turn, emphasised that the local attitude and the way of thinking and acting were conservative cognitive inclusions (Stenberg, Zbang, 2005, p. 251). This is preferred by teachers fully adapted to the patterns and rules governing an educational institution, which rejects the use of alternative solutions. However, specific patterns for teaching theory and practice are not always appropriate in every conditions and time. It may, though, be useful in certain circumstances or in problems oriented towards certain solutions. In other cases, flexible and creative thinking and work are necessary, so that teacher’s skills and tools created for years are in

tune with the educational situations and tasks appearing at present. Therefore, they should become a valuable mosaic of pattern, creativity and the undertaken changes. They may be based on the assumptions of perennis pedagogy and scientific pedagogy (Nowak, 2010, p. 34). Their mutual interactions penetrate each other as both perennis pedagogy, favouring intuition and the art of upbringing, thus constituting an important criterion for knowledge authenticity, and the scientific pedagogy, based on rational solutions providing a basis for practice, come to light. Hence, for teachers, practice as well as theory are certain measures of progress of pedagogical sciences “placed between wisdom and time-conditioned knowledge” (Nowak, 2010, p. 39). Teachers’ rationalism intertwines with intuition and creativity, enabling to create their professional skills and tools. They should serve both them and pupil to discover various knowledge areas together, and to learn about the complexity of one’s nature and the chosen profession.

RESEARCH FINDINGS

The diagnostic procedure¹ constituting a more comprehensive fragment of the research took into consideration learning about teachers’ predispositions to creative activity impinging on the shape of their professional skills and tools. The included study sample deliberately selected individuals studying at AMU in Poznań. Out of 450 people, 384 were qualified for the fundamental studies. The beneficiaries came from three types of environment: small town (46%), big city (37.5%) and village (17%). The group was diverse in terms of age: 22 years old (100%) – students of the art of teaching, 25 years old (79.2%) – young teachers, and more than 25 years old (83.6% women and 16.4% men) and around 40 years old (34%) and more than 40 years old (67%) – senior teachers with 20 years of experience (45.8%) and more (54.2%). Within the group of younger teachers, 80% had up to five years of experience, and 20% had more. The majority of the younger and senior teachers worked at primary schools (79%) and middle schools (21%).

¹ The fragment of research results comes from the author’s book: *Kreatywność w edukacji nauczyciela*, Poznań 2013.

The study used a categorised questionnaire of teacher's professional activities developed by J. Gnitecki and modified by the author. It provided a great deal of interesting information. The standardised research tool included four parts. The first one contained nine questions and concerned formulation of aims, selection of tasks, content, methods and organisational forms applied in the didactic work. The second part, transformed by the author, was made up of six questions. It referred to the way teachers influenced their pupils. The third part included seven questions that embraced basic information and skills. The fourth part, in turn, again transformed by the author, was connected with the perspective of teachers' use of professional knowledge, finding out what atmosphere prevailed at their educational institution, and the possibility to introduce changes to their professional skills and tools. A nine-degree scale was applied and a correlation value was calculated to be $\alpha = 0.05$. The obtained results suggested that a certain level of professional activities existed, and illustrated a diverse selection of the chosen components of the teaching and learning process, making creative and/or imitative functioning, resulting from professional skills and tools, possible for the teacher.

For the sake of this paper, a fragment of author's research was presented to show some data obtained from the general analysis of the material given in the table below.

TABLE 1. General analysis of values from the questionnaire on teacher's professional activities

Students of the art of teaching				Young teachers			Older teachers		
Objectives, tasks, content, methods and forms	N	rp	V%	N	rp	V%	N	Rp	V%
Low level	50	0.25	6.2%	20	0.21	4.4%	27	0.41	16.8%
Medium level	60	0.37*	13.7%	75	0.22*	4.8%	70	0.54*	29.1%
High level	18	0.7	49%	33	0.6*	36%	31	0.35	12.2%
Total	128	0.47*	22.1%	128	0.31*	9.6%	128	0.43*	18.5%
Teacher's influence									
Low level	43	0.24*	5.7%	42	0.27*	7.3%	71	0.29*	8.4%
Medium level	77	0.78*	60.8%	72	0.62*	38.4%	43	0.4*	16%
High level	8	0.8	64%	14	0.38	14.4%	14	0.34	11.5%
Total	128	0.59*	34.8%	128	0.47*	22.1%	128	0.24*	5.7%

Students of the art of teaching				Young teachers			Older teachers		
Objectives, tasks, content, methods and forms	N	rp	V%	N	rp	V%	N	Rp	V%
Basic knowledge, abilities									
Low level	37	0.26*	6.7%	105	0.4*	16%	94	0.65*	42.3%
Medium level	74	0.3*	4.4%	23	0.3	9%	31	0.3*	9%
High level	19	0.55*	30.2%	0	0	0	3	0.43	18.5%
Total	128	0.5*	0.25%	128	0.34*	11.5%	128	0.48*	23%
Other									
Low level	8	0.37	13.7%	79	0.9*	81%	100	0.51*	26%
Medium level	93	0.24*	5.7%	44	0.4*	16%	20	0.11	1.2%
High level	27	0.8*	64%	5	0.3	9%	8	0.41	16.8%
Total	128	0.41*	16.8%	128	0.31*	9.6%	128	0.3*	9%

Source: Author's own factsheet, significant values of correlation were marked with asterisks, at the level $\alpha = 0.05$.

The numerical values obtained showed that in the first part of the questionnaire, which concerned formulation of aims, tasks, content, selection of methods and forms of working, a medium level was found in half of the respondents from all the three groups. Some of the young teachers implemented activities from the first part of the questionnaire at a high level, for which a significant correlation value equal to 0.6 was obtained. It should be added that a significant number of tested individuals, particularly students of the art of teaching, were placed at a low level for the activities from the first part of the questionnaire. It showed, on the one hand, weak involvement of education participants in their educational process and, on the other hand, it may arouse hope for improving their level by introducing various changes into education that later affect the teaching profession. A larger part of senior teachers, in turn, realised the first part of the questionnaire at a medium level, obtaining high and significant correlation equal to 0.54. Senior teachers' attitude towards professional duties and their skills and tools gives cause for optimism.

The second part of the questionnaire took into consideration teachers' influence. For all respondents, the values were more or less evenly distributed at a low and medium level, pointing, however, to the positive dimension of the educated pupils. Slightly less favourable quantitative distribution was obtained

for the third part of the questionnaire, which concerned basic information and skills. A low level prevailed in the subjects, with the exception of the students of the art of teaching and senior teachers, for whom a medium level crystallised with significant correlation value ranging from 0.29 to 0.5. Part of the students of the art of teaching were characterised by unusual properties and obtained a high level for basic information and skills confirmed by a significant statistical value (0.55), conducive to their creativity. It was concluded that with the passage of time they obtained lower levels for gathered information and skills that amounted to 0.4 for young teachers and 0.48 for older ones, which also demonstrated lack of opportunity for creativity and development of skills and tools. The low level of knowledge among young teachers probably resulted from their intentional attitude to fulfilling professional duties. This situation was explained, among others, by P. Zamojski (2009, pp. 124–130). He pointed to deficiencies in reflection on methods of one's own conduct. It causes validation of imitative activity, conditioning routine in the didactic process. Later on, this regression of professional duties, as the author stated, was connected with expecting orders from the authorities of a given educational institution and shaping a self-centred character of education. This produces contradictions between what teachers declare, what dispositions they possess and the real use thereof and rational action, which T. Szkudlarek labelled as: "*epistemological evasion*" (Zamojski, 2009, p. 133).

The last part of the questionnaire, in turn, took into account a category called 'other activities', which the respondents understood in various ways. Most saw them at a medium level – the students of the art of teaching and young teachers, but $\frac{1}{4}$ was found at a high level, which positively affects their professional skills, tools and creativity.

A loss of individual potential was noticed in older female teachers, which negatively affects their professional skills and tools and the fulfilment of professional activities. In this group of beneficiaries, similarly to the two previous ones, formulation of aims, selection of tasks, content, methods and forms of teaching were at a medium level. This trend was not maintained in time perspective, as the correlation value fell, confirming the downward trend. However, the most disadvantageous direction concerning the other activities that was revealed after two years was a lack of individuals among senior female teachers who could be qualified for the high level. It was noted that the majority of senior teachers realised activities of influencing others at a low level, and a small number – at a medium level, obtaining significant correlation values.

No one qualified for the high level as far as basic information and skills are concerned. An increase in the correlation value was only noted for other activities, i.e. the atmosphere at the institution and the undertaken improvement without a possibility to introduce changes to the professional skills and tools. Most of the older teachers wanted to get university education due to the prospects for improving their low economic status and leaving the job.

CONCLUSION

The discussed theoretical considerations and the research fragment show that at a given moment of time and within a selected time period the beneficiaries used the same working and teaching style more frequently than a varied one. This was connected with more schematic than creative behaviour in the didactic process. Expository methods and talks were excessively used, instead of creative methods. It caused young and senior teachers to realise B. Adrajn's (p. 379) thesis and concentrate on the past, present and traditional intelligence rather than on the future and practical, analytical and creative intelligence proposed by R. Sternberg. Undertaking new, sometimes risky, creative activities was thus difficult, and independent thinking and criticism were prevented. Hope for balancing the different types of thinking and acting is, however, given by the students of the art of teaching entering the profession.

The environment in which educational successes would be achieved was a positive element in the formation of professional skills and tools. Overrepresentation by small town was an obstacle, as in the case of the respondents. Provinciality interfered with the structure and management of primary and lower-secondary educational institutions. This situation caused impotence, additionally giving a sense of no sovereignty or independent realisation of the profession, which was noticed more by senior teachers than by younger ones. The specific atmosphere of teachers' functioning imposed a habitus in the form of rules, habits, relations of existence at school and fulfilling the responsibilities of the profession in which creativity rarely appeared. This picture was contrasted with educational freedom at university where respondents learnt about different styles of performing teachers' duties. The situation led to discord within the respondents' awareness, provoking either schematic or creative activities in the workplace and at university. In spite of gaining varied experi-

ence, they decided to realise a creative trajectory resulting from their mosaic professional skills and tools and fulfilling the role of “*paidagogos*”, thus complying with the quote by M. Twain presented above.

REFERENCES:

- ADRIAN, B. (2009), *Zreformowana polska szkoła z klimatem z przeszłości? Patologia w stylu retro*, in: *Paradygmaty współczesnej dydaktyki*, D. Klus-Stańska, L. Hurlo, M. Łojko (eds.), Oficyna Wydawnicza „Impuls”, Kraków.
- BERGER, P., Luckman, T. (2010), *Spółeczne tworzenie rzeczywistości. Traktat z socjologii wiedzy*, trans. J. Niżnik, PWN, Warszawa.
- BRACH-CZAINA, J. (1999), *Szczeliny istnienia*, eFKa, Kraków.
- CZARNECKI, K. (2008), *Podstawowe pojęcia zawodoznawstwa*, Wyższa Szkoła Humanitas, Sosnowiec.
- DRYDEN, G., Vos, J. (2003), *Rewolucja w uczeniu się*, Zys i S-ka, Poznań.
- DURAJ-NOWAK, K. (2000), *Nauczyciel. Kultura – osoba – zawód*, Wyższa Szkoła Ubezpieczeń Mediator, Kielce.
- GULIFORD, J.P. (1978), *Natura inteligencji człowieka*, PWN, Warszawa.
- KLUS-STAŃSKA, D. (2012), *Konstruowanie wiedzy w szkole*, Wydawnictwo Uniwersytetu Warmińsko-Mazurskiego, Olsztyn.
- KOBYLIŃSKI, W. (1984), *ABC organizacji pracy nauczyciela*, WSIP, Warszawa.
- KOZŁOWSKI, J. (1966), *Nauczyciel a zawód*, Nasza Księgarnia, Warszawa.
- KWIATKOWSKA, H. (2005), *Tożsamość nauczyciela*, GWP, Gdańsk.
- KWIATKOWSKA, H. (2008), *Pedeutologia*, Wydawnictwa Profesjonalne i Akademickie, Warszawa.
- LUCKMAN, B. J. (2007), *Theory and Development of Creativity for the Gilford*, Florida.
- MAJKA, J. (1981), *Metodologia nauk teologicznych*, Wydawnictwo Wrocławskiej Księgarni Archidiecezjalnej, Wrocław.
- MASLOW, A.H. (1986), *W stronę psychologii istnienia*, PWN, Warszawa.
- NOWAK M. (2010), *O wiedzy pedagogicznej*, in: J. Piekarski, D. Urbaniak-Zajac, K.J. Szmidt (eds.), *Metodologiczne problemy tworzenia wiedzy w pedagogice. Oblicza akademickiej praktyki*, Impuls, Kraków.
- PALKA, S. (1997), *Sylwetki nauczycieli tworzących warsztat pracy*, „Szkoła Zawodowa”, 5.
- ROGERS, C.R., (1959), *Towards a Theory of Creative*, in: M.H. Anderson (ed.), *Creativity and Its Cultivation*, Michigan State University, New York.

- SCHULTZ, A. (2008), *O wielości światów. Szkice z socjologii fenomenologicznej*, trans. B. Jabłońska, NOMOS, Kraków.
- STERNBERG R.J., Lubart, T. (1999), *The concept of creativity. Prospects and paradigms*, in: R.J. Sternberg (ed.), *Handbook of Creativity*, Cambridge University Press, Cambridge.
- STERNBERG, R.J., Zbang, L. (2005), *Styles of thinking as basis differentiated instruction*, "Theory into Practice", 44(3).
- TRZEBIŃSKI, J. (1994), *Rola schematów poznawczych w zachowaniach społecznych*, in: J. Trzebiński, M. Lewicka (eds.), *Psychologia spostrzegania społecznego*, Wydawnictwo SWPS Academia, Warszawa.
- WARDYŃSKA, M. (1999), *Wzbogacanie warsztatu pracy i umiejętności pedagogicznych*, „Problemy Opiekuńczo-Wychowawcze”, 3.
- USZYŃSKA-JARMOC, J. (2007), *Od twórczości potencjalnej do autokreacji*, Wydawnictwo Trans Humana, Białystok.
- WITKOWSKI, L. (2003), *Przekleństwo codzienności*, „Teraźniejszość – Człowiek – Edukacja”, special issue, Wydawnictwo Naukowe Dolnośląskiej Szkoły Wyższej, Wrocław.
- WOJNAR, I. (1996), *Aktualne procesy edukacji i kultury w Polsce i na świecie*, in: I. Wojnar, J. Kubin (eds.), *Edukacja wobec wyzwań XXI wieku. Komitet prognoz „Polska w XXI wieku” przy prezydium PAN*, Warszawa.
- WSPÓŁCZESNY słownik języka polskiego (1998), O. Wojniłko (ed.), Readres Digest, Warszawa.
- ZAMOJSKI, P. (2009), *Ideologiczne wymiary procesu kształcenia a zakres problemowy dydaktyki*, in: *Paradygmaty współczesnej dydaktyki*, D. Klus-Stańska, L. Hurlo, M. Łojko (ed.), Oficyna Wydawnicza „Impuls”, Kraków.