

SCIENTIFIC AND METHODOLOGICAL ASPECTS OF IMPROVING THE QUALITY OF HUMANISTIC EDUCATION IN THE ERA OF TRANSFORMATION

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INTRODUCTION

Adjusting education to the standards of the knowledge society, which requires innovation and evaluation in the context of designing the improvement of the quality of education at all levels, is among the basic research problems of modern didactics. In the era of transformation, while we face the globalization processes, the issue of education promoting humanization in everyday life becomes particularly important. This makes the humanistic education, associated with, among others, patriotic education and social communication, as well as the culture of language (a living word) become more and more important. This article will focus on the crucial aspects of humanistic education, including language and multicultural education in the interests of improving its quality.

The issue of the essence of the quality of school education as well as academic education – their synonyms, conditions, determinants and expression are reflected in many scientific studies, especially in the works of K. Denek¹.

We are currently witnessing frequent changes in education, especially in increasing the quality of education and research. Their clarity is disturbed by the fact that they take place in conditions of fierce competition for clients (pupils – students) caused, among others, by demographic decline, socio-economic changes or the requirements of the changing labour market.

¹ K. Denek, *Uniwersytet w perspektywie społeczeństwa wiedzy. Nauka i edukacja w uniwersytecie XXI wieku*. Poznań 2011; K. Denek, *Pomiar efektywności kształcenia w szkole wyższej*. Warszawa 1980;

Designing the quality of education and determining its effectiveness is very extensive. In the processes of constructing and implementing innovative solutions, it is important to enter the path of diagnosing the effects of teacher's own activity as soon as possible, which should lead to the modernization of school (and academic) didactics, as well as to the high efficiency of shaping competences on the side of each pupil (student).

1. Clear formulation of educational goals seen as the basis for the design of improving education quality

The quality of education at school and university is conditioned by many variables that lie on the side of all participants of educational processes, as well as outside the process. The national and European qualifications framework system is an excellent opportunity for redesigning education with the new guidelines. It requires a fairly careful treatment of the content structure and selection of educational methods in terms of learning outcomes related to the real (not imaginary) competences of each learning entity in three dimensions, respectively knowledge, skills, and social competences. Moreover, it requires a reliable and objective diagnosis and evaluation of the level of didactic work of academic teachers; implementation of pro-quality instruments; creating an incentive system for teachers (academic teachers). The care for the quality of education in the aspect of its design expressed in the multilateral development of the subject (pupil, student) requires continuous improvement in the context of the interaction of teacher / academic teacher (N) ↔ pupil / student (U), their corresponding processes, i.e. education (k) and study (s), and variables determining their effects, i.e.: respecting principles (z), setting goals in the category of functions, activities and tasks (c), as well as selection of content (t), educational methods (m), organizational forms (f) adequate for their implementation, together with teaching resources (s), place serving as a base for conducting classes (b), i.e. laboratories and classrooms, lecture auditoriums and all sites not being the *school desk*, and ways of evaluating (e) the progress of pupils / students that they achieve in educational processes and their own

work outside the school / university. We thus come to establishing and evaluating the interpretation of the relation ($N \leftrightarrow U$) and its effects by seeking answers to the following questions:

- 1) who (N) educates whom (U)?
- 2) why (c)?
- 3) what regularities govern the teaching process (z)?
- 4) what content should this process favour (t)?
- 5) what methods, organizational forms and teaching aids to choose and how to do it?
- 6) how and where to choose the base for the classes? and
- 7) are the effects achieved realistically adequate to the previously set goals of these educational processes?

All of these elements are important enough to strive to education that would be: smarter, fuller, better, faster, easier and more effective, to the joy of learners and at the same time in order to meet the challenges of the present and future. In general, we come to the determinant of the effectiveness (efficiency) of education (E) as the function (φ) of many variables (listed above together with the indications) expressed by the general formula:

$$E = \varphi (N \leftrightarrow U, c, z, t, m, f, s, b, e).$$

The structural elements of the educational process presented above and the relationships between them are based on the principle of multivariate (both in kindergarten, at school and at university). They prove the complexity of educational processes and the importance of measuring and evaluating their effectiveness (conceived in terms of the quality of education). It should be emphasized that the principles set out in theories of education (including both learning and teaching) should be thoroughly respected by each teacher in all links and phases of organized situations and educational processes for each student individually – and, at other times, for a competent team member.

The modification of even one of the highlighted elements inevitably entails the modification of the entire educational process seen as a whole

system. This will be more felt and noticeable in cases of simultaneous modification of several components constituting the structure and the course of educational processes. Relations between learning processes and the environment are also regulated by way of feedback. It can affect globally all of its elements, as well as each of them separately. The influence exerted by clearly defined and formulated educational goals is the most pronounced. They fulfil a superior function over other elements of the education process. This is due to the fact, that each task situation (as an assumed change or innovation) introduced within the didactic process should be adequate to at least one of the goals set.

The so-called “*purpose principle*” featured in theory assumes the adequacy of all actions taken against individual goals set before their start – actions which are to improve the process seen as a whole, as well as its individual components. K. Sośnicki rightly treats “defining learning objectives as a fundamental task for teaching”². This task was reflected in the theory of education preferring the unity of goals, content and methods of learning³ or the interdependence between goals and the selection of adequate didactic content as well as methods of education and self-education⁴.

When attention in education is not paid to a specific and at the same time clear formulation, and then to achieving the goals of education in a university (resulting from the⁵ value), all scientific discourses and methodical discussions, which lack values aiming at the improvement of content, methods, forms and means as well as ways of learning, controlling, analysing and evaluating the progress made by students during learning, are not only difficult, but usually pointless.

Due to the huge role of didactic goals in projects related to the improvement of the quality of education, I devoted a lot of attention to

² K. Sośnicki, *Dydaktyka ogólna*. Wrocław 1959.

³ K. Kruszewski, *Kształcenie w szkole wyższej*. Warszawa 1988.

⁴ J. Bruner, *W poszukiwaniu teorii nauczania*. Warszawa 1974.

⁵ J. Mastalski, *Aksjologiczne przestrzenie spotkania w edukacji*. In: K. Denek, T. Koszczyk, P. Oleśniewicz (eds.), *Edukacja jutra. XV Tatrzańskie Seminarium Naukowe*. Wrocław 2009.

constructing and designing them in my many years of didactic, educational, scientific and research activity⁶.

For similar reasons, a lot of place in my work as academic teacher and in my scientific research was occupied by the problems of design of didactics (selection and arrangement of the content of education) and docimology (learning, controlling, analysing and evaluating student learning and the examination process). Advanced statistics methods and Markov chains were also used to solve these issues⁷.

Many elements of constructing and designing the improvement of the quality of education in universities can be found in multiple versions of didactic programming⁸.

2. Designing in educational processes as an object of scientific research

Designing the improvement of the quality of education at the university consists of harmonious integration of education and upbringing mechanisms in terms of measurable effects in the areas of knowledge, skills and values. Values (recognized and respected) make up the social behaviour of each individual and hence they are the basic element of social competences that have been highlighted in the concept of national qualifications framework⁹. Objective learning of values is one of the most important goals in education¹⁰.

The psychologists and pedagogues actions pursuing the goals to control the conditions, course and effects of education at various levels

⁶ K. Denek, *Wartości i cele edukacji szkolnej*. Poznań – Toruń 1994; K. Denek, I. Kuźniak, *Projektowanie celów kształcenia w reformowanej szkole*. Poznań 2000; K. Denek, *O nowy kształt edukacji*. Toruń 1998; K. Denek, *Uniwersytet w perspektywie społeczeństwa wiedzy. Dydaktyka akademicka i jej efekty*. Poznań 2011.

⁷ K. Denek, I. Kuźniak, *Kwalifikowanie wiedzy uczniów we współczesnej szkole*. Koszalin 1980; K. Denek, J. Gnitecki, R. Meller, A. Mościcki, *Struktury dydaktyczne i ich uwarunkowania*. Koszalin 1978.

⁸ K. Denek, *Wpływ nauczania programowanego na edukację i nauki o niej*. In: W. Strykowski (eds.), *Od nowych technik nauczania do edukacji wirtualnej*. Poznań 2006; K. Kruszewski, *Nauczanie programowane w systemie dydaktycznym*. Warszawa 1974; C. Kupisiewicz, *Nauczanie programowane w szkolnictwie wyższym*. Warszawa 1974; K. Denek (eds.), *Programowanie dydaktyczne w szkole wyższej*. Warszawa 1984.

⁹ J. Grzesiak, *O poprawie jakości edukacji narodowej na forum*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji. Poprawa jakości kształcenia*. Kalisz – Konin 2012.

¹⁰ W. Chudy, *Pedagogia godności. Elementy etyki pedagogicznej*. Lublin 2009.

undertaken in the interests of their optimization¹¹ are treated as attempts to structure¹² or design¹³ the educational process. These are, however, synonyms from the group of concepts used in education and research in education, where the same word (term) may take different meanings¹⁴.

Teaching design is the subject of scientific studies carried out by many Polish didactic researchers, including: F. Bereźnicki, K. Denek, W. Furmanek, J. Gnitecki, J. Grzesiak, S. Juszczyk, W. Kojs, K. Kruszewski, I. Kuźniak, R. Meller, J. Morbitzer, B. Siemieniecki, W. Strykowski, K. Wenta and others. The outstanding teacher and theologian J. Mastalski¹⁵ notes that in the field of evaluation and innovation of education, including the design of educational processes, the work of J. Grzesiak deserves special attention¹⁶.

An interesting example of activities that make up the design of a pedagogy course for students of the Faculty of History at the University of Warsaw is included in the didactic skills manual written by K. Kruszewski¹⁷. Moreover, an interesting proposal for the design of public university management in Poland was developed by C. Kochalski together with a team of collaborators from the Poznań University of Economics. It has interdisciplinary character and goes beyond the issues of narrowly understood strategic management¹⁸. An equally original design proposal

¹¹ J.K. Babiński, *Optymalizacja procesu nauczania*. Warszawa 1979; K. Denek, *Optimization and a system interpretation of the teaching process as the trend of the school innovations*. „Neodidagmata” 1985, vol. XVII; J. Poplucz, *Organizacja czynności nauczycielskich*. Warszawa 1982.

¹² R.H. Davis, L.T. Alexander, S.L. Yelon, *Konstruowanie systemu kształcenia*. Warszawa 1983; J. Grzesiak, *Konstruowanie i dobór zadań matematycznych w klasach początkowych*. Koszalin 1984.

¹³ R.M. Gagné, L.J. Briggs, W.W. Wager, *Zasady projektowania dydaktycznego*. Warszawa 1992.

¹⁴ T. Pawłowski, *Tworzenie pojęć w naukach humanistycznych*. Warszawa 1986.

¹⁵ J. Mastalski, *Współczesne inhibitory dekomponujące ewaluację w edukacji*. In: K. Denek, L. Pawelski, B. Urbaniak, L. Wenta (eds.), *Wielkopolskie Forum Pedagogiczne w obliczu ewaluacji i innowacji*. Kalisz – Szczecinek 2012.

¹⁶ See e.g. J. Grzesiak, *Nauczanie „żywe” i karty pracy we współczesnej szkole*, In: K. Denek, T. Koszczyk, P. Oleśniewicz (eds.), *Edukacja jutra. XII Tatrzańskie Seminarium Naukowe*. Wrocław 2006; J. Grzesiak, *Podstawy teorii i metodyki kształcenia praktycznego nauczycieli*, Konin 2010; J. Grzesiak, *Lekcje i diagnostyka psychopedagogiczna w edukacji dziecka*. Konin 2014; J. Grzesiak, *Ewaluacja i innowacje w przygotowywaniu procesu lekcyjnego – wyznacznikiem kompetencji nauczycieli*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji*, vol. 3, Konin 2007; J. Grzesiak, *O powołaniu nauczyciela do żywej metodyki wobec procedur ewaluacyjnych w zmieniającej się klasie szkolnej*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji, Autoewaluacja i refleksyjność nauczyciela*. Konin 2007; J. Grzesiak, *Przez analizę wartości do postępu pedagogicznego*. In: T. Zacharuk (eds.), *Ciągłość i zmiana w pedagogice XXI wieku*. Siedlce 2007.

¹⁷ K. Kruszewski, *Kształcenie w szkole wyższej*. Warszawa 1988.

¹⁸ C. Kochalski (eds.), *Model projektowania i wdrażania strategii rozwoju w publicznych szkołach wyższych w Polsce*. Poznań 2011.

for ensuring the quality of education at the university was created at the State Higher Vocational School in Konin¹⁹.

3. Design and evaluation in education in the light of own research

Any activity carried out in didactic design will always be accompanied by numerous interfering variables. Their source can be seen in the imperfections of core curricula in schools (and kindergartens), as well as in education standards at universities. Our long-term research indicates that instead of preferring values related to the valuation of knowledge and social competences, the priority is given to the unclear and general formulation of skills or general competences, which often lack practical usefulness.

Education, and even more so language and humanistic education, is quite often characterized by multiplying schemes which are distant from useful knowledge and behavioural norms of the surrounding reality. Language learning treats the development of students' vocabulary too schematically; the knowledge of children, classical literature is treated fragmentary. Language, or more broadly humanistic education in contemporary school often avoids values and valuation on the basis of biasedly selected source content, both in the form of prose or poetry. On the one hand, the pupil is encouraged to read, and on the other hand, little time is devoted to developing speaking and raising the awareness of the beauty of spoken and written language. When pupils in the classroom are asked about what they would like to learn, the questions are apparently conducive and neglect the values inherent in what they should know and understand. The illusory quality of such education is verified by the image of first-year students who do not have the basic knowledge and skills necessary for independent studying and reading of magazines or books.

The results of secondary school-leaving examinations (final exams) are more and more worrying, despite the fact that the sets of exam tasks are

¹⁹ J. Grzesiak (eds), *Profesjonalne praktyki – profesjonalni nauczyciele*. Vol. 1–IX. Konin 2010–2014; J. Jasiński, A. Zimny, *Zarządzanie jakością kształcenia w szkole wyższej – koncepcja wdrożenia i doskonalenia system*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji. Poprawa jakości kształcenia i jej uwarunkowania*. Kalisz – Konin 2012.

characterized by relatively low standards of requirements for the current core curriculum. However, in relation to the exam with an extended profile, the degree of difficulty of the tasks posed for understandable reasons is much higher. At the same time, it contributes to the widening scale of inefficiency among those students who are otherwise interested in obtaining the highest percentile status deciding about admission to studies. The high school diploma in most subjects is embarrassingly schematic and devoid of humanistic values. As a result, students entering university do not know the content of basic works of literature and have difficulties in assigning their authors to adequate literary periods. The sloppy language, ignorance of philosophical, historical, ethical or moral contexts of the exam raise anxiety and astonishment. It is more and more rare to encounter a student who would be sensitive to the beauty of literature, word, sound, image, or to the beauty of behaviour and clothing. This is due to, among others, to the fact that teachers and parents do not enforce reading books in their entirety, and reading is thus limited to selected fragments, a quarter chapter, two, three paragraphs, several stanzas of songs by J. Kochanowski, or even a quarter of drama by J. Słowacki, or of a comedy by A. Fredro²⁰. As a result of the high school final exam constructed in such a way, young people going to universities are not always in a good chance of education adequate to their abilities and skills. The low knowledge of literature, and consequently the low level of the spoken and written language culture mean that more and more bachelor's, master's and even doctoral dissertations contain numerous stylistic, syntactic, grammatical, punctuation and even spelling mistakes. At this point, a reflection arises in the form of the thesis that, in addition to the promoters, the level of preparation of students for writing their diploma theses is also largely the responsibility of school teachers and academic teachers, under the influence of which a given pupil (student) has been developing from the first grade, and even from kindergarten.

²⁰ K. Denek, *Czy szkoła może zadbać o poprawność języka polskiego?* „Nowa Szkoła” 2007, nr 4-5.

Therefore, reliable, responsible and, above all, competent actions should be taken to ensure that school children and students grow in language culture, especially on what concerns the values of their native language and broadly understood humanistic education. This requires constant reading, work on the proper autonomous elaboration, as well as a critical assessment of the works of various authors.

The phenomenon of lowering the level and scope of requirements causes careless laziness and unsolicited “partying” in case of most pupils (and students). Such manifestations of lack of values and wisdom are compounded by the actions of a large proportion of teachers and, unfortunately, also academic teachers expressed in artificial and uncritical respect for borrowed “fashionable innovations” such as: *joyful school*, *school closer to the student*, *stress-free school*. This proves the ignorance or disregard of psychological theories and education sciences, which results in the inevitable phenomenon of giving up on the quality of education (including teacher education) on the side of anomies in the form of “joyful mediocrity”, which results in a growing number of smug and ignorant arrogants (dumbs), helpless in life, and having an excessively high level of self-assessment of their (non-existent) competences.

Our research also indicates a wide scale of the phenomenon of not using negative assessments, mainly not to be accused of *undercutting level school*, or in the faculty (department, institute) of the university. This, in turn, leads to a kind of “propaganda of success” characterized by a lack of concern for the reliable and systematic activity of each learning entity – towards fulfilling responsible tasks and roles in the future in the region and even the whole country.

It should also be emphasized that the manifestations of fetishization of test-mania, point-mania and surveyors, which are constantly spreading in education, are not conducive to increasing the quality of education, and even more so in the field of humanistic education²¹.

²¹ J. Grzesiak, *Determinanty poprawy jakości w obliczu krajowych ram kwalifikacji – kompetencji*. In: J. Grzesiak (eds.), *Ewaluacja i innowacja w edukacji. Poprawa jakości kształcenia i jej uwarunkowania*. Kalisz – Konin 2012.

In the search for ways to improve the effectiveness of education and research, one cannot ignore the issue of the quality of teachers' work as those who decide about the effectiveness of aspirations focused on improving didactics and research in universities²². This is all the more necessary in the face of discrepancies between aspirations and the actual effects of their professional work. The symptoms of excessive quantitative aspects of teachers' professional preparation are still worrying at the expense of concern for their qualitative and personal qualifications (ability to reflect and be creative, use of new communication and information technologies, understanding market requirements and the knowledge-based economy, the habit of continuous training and improvement, autonomy, innovation, responsibility, entrepreneurship)²³.

Indicators are indispensable to evaluate the quality of classes. The basic tools that are useful for assessing the quality of education are: sheets of hospitalization of didactic classes, assessment questionnaires and self-assessments of teachers and academic teachers, reports on the analysis of examinations conducted in individual subjects of study, rankings and plebiscites for the best teachers at school or in the field of education at the university . Our analysis of data obtained in the course of evaluation studies indicates that the participation of students in answering questions regarding the quality of education is too low. In the years 2015–2019, in each semester the percentage of students participating in the study was low and ranged from 3 to 19% of the total number of students. It is therefore difficult to attribute pro-quality significance to quantitative indicators answering individual survey questions. You can also use *guided introspection* to study students' opinion surveys about didactic classes on condition that its results are confronted with results obtained by means of objective methods²⁴. We are worried that the question requiring the number of student's own working hours for a given subject of study was found to be unanswered in 98% of all students participating in our research. It can

²² Z. Ratajek, *Nowy nauczyciel – lider na XXI wiek?* „Nowe Horyzonty Edukacji” 2012, nr 3; K. Denek, *Uniwersyteckie kształcenie nauczycieli*. „Nowa Szkoła” 2013, nr 1.

²³ W. Dróżka, *Poszukiwany nowy nauczyciel*. „Nowe Horyzonty Edukacji” 2012, nr 1.

²⁴ W. Okoń, *Nowy słownik pedagogiczny*. Warszawa 2004.

be assumed that this was due to the small size of using the reading room or studying outside the classroom at home or in the reading room. This issue requires additional research, at least because of the frequent reforming of the education system and evaluation procedures at all levels of education – also in relation to teacher education.

4. Specificity of measurement and indicators of improving the quality of humanities education

In the area of language and humanities education (including civic and patriotic), particular attention should be paid to the measurability of the results obtained as changes in the social competences of learners under the influence of all participants of educational processes, especially on the part of teachers (and academic teachers). It is also necessary to recognize the close links between social behavior norms (in terms of competence) and the values of knowledge and skills (instrumental skills) in accordance with the principle of the unity of the triad: knowledge – value – efficiency.

The specificity and complexity of humanities education integrated with cultural (and linguistic) education necessitates helping students and their parents learn, discover, feel, understand and prefer values as an ethical norm. There is also a need to support teachers and academic teachers who prepare students to work as teachers who have a complex of educational tasks resulting from the core curriculum and qualifications framework defined by education law²⁵.

Our research indicates that evaluation procedures used in school practice and in universities are often reduced to technocratic mechanisms for creating various types of supposed so-called tools for measuring the quality of education. These include: surveys, tests, point criteria, percentage indicators, statements, tables, diagrams, matrixes, lesson observation sheets, evaluation sheets, etc. In fact, their use causes

²⁵ The ordinance of the Ministry of Science and Higher Education of 17 January 2012 on standards of education preparing for the teaching professiona, J.L. 2012, pos. 131; The Ministry of Science and Higher Education regulation of November 2, 2011. *on the National Qualifications Framework for higher education*, J.L. of 2011, No. 253, pos. 1520, as amended).

excessive burden on teaching staff by schematic formal activities, which usually do not serve to actually improve the quality of education.

Teaching, therefore, faces an urgent and responsible challenge to properly prepare all participants of education for the use of evaluation and self-evaluation in the life of every person on a daily basis and in the process of his work. This is a condition *sine qua non* to implement the anticipated assumptions of quality evaluation in educational processes. In view of the growing social requirements in teacher education, the basics of "learning to change for the better" and "learning of evaluation" towards the improvement of the quality of own pedagogical work and, consequently, the improvement of the quality of educational processes at all levels can not be missing.

In educational practice, despite the development of the theory of education, there is a scarcity of original ways of determining the actual learning outcomes, which are indicators of the real competences of the pupil (student, future teacher) shaped at a given stage of education. Both in practice and in literature there are numerous controversies regarding qualification of student's achievements. They are caused, among others, by the promotion and fetishisation of simplified methods of controlling and assessing these achievements in the form of so-called tests, and in universities written forms of credits and exams (to a large extent the so-called test ones). This practice has significantly reduced the speaking skills of most pupils and students. Our research also shows that the so-called worksheets and all written forms resulted in a decrease in speaking skills, as well as loosening interpersonal ties in the structure of a school class or student group. The widespread use of written exams at universities contributes to a decrease in the ability to freely use the concepts being studied, as well as a decrease in integration processes between students. This is a very disturbing phenomenon in the face of challenges from the knowledge society, and in particular in relation to the shaping of competences among students preparing to work as a teacher.

First of all, the thread of assessing students in the context of the syllabuses of individual subjects being developed – in close correlation

between the lecturers and (practical) classes, cannot be omitted. We assume that the education process requires teachers to use optimized didactic measurement tools adequate to the assumed learning outcomes. The specificity of each subject of education and ongoing psychopedagogical diagnostics means that the use of universal, same measurement tools on a regional scale, and even more so nationwide tools, is excluded. Therefore, there is a necessary need for each teacher to develop tools adequate to the conditions of educational situations organized in a specific team of students (pupils). Our evaluation studies (in selected fields of teacher studies) prove that in syllabuses there are numerous records bearing the features of fragmentary fragmentation and excessive generality, which does not contribute to improving the quality of methodological procedures and related measurable results in the form of measurable competence of each student. In the end, passing the course comes to the use of intuitive solutions, which often do not orient both the student and the academic teacher.

5. Determining the synthetic competence indicator (pupil – student)

Distinguishing in theory and in syllabuses three categories of learning outcomes (W – knowledge, U – skills and Z – behaviors) finds its rational justification and does not cause controversy in terms of content²⁶. However, in practical solutions the above triad presents many difficulties, especially in determining detailed and measurable indicators of real achievements of studying (learning) entities. This leads to frequent discrepancies and an understandable deviation from theoretical and methodological assumptions. Questions arise about what tools and how to measure students' achievements in each of these three categories of effects, so that it is finally possible to determine the level of their competence in a given subject of study (final semester assessment). In the further part of

²⁶ See e.g. J. Grzesiak, *Pewność wiedzy i samodzielność działania w procedurze oceniania studenta w uczelni*. Konin 2005; K. Denek, *Ewaluacja osiągnięć studentów w nauce oparta na strukturze zdobywania przez nich wiedzy i jej poziomach*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji. Ocenianie skuteczności kształcenia w szkole wyższej*, Konin 2005; J. Grzesiak, *Jakościowe kwalifikowanie kompetencji studentów wobec europejskich standardów edukacji*. In: K. Żegnałek (eds.), *Edukacja polska w konstelacji europejskiej*. Siedlce, 2013.

this discourse, we will focus on presenting the author's concept of measuring the effects of education called "*Synthetic Competency Index*" (SWK), supported by examples of measuring student's achievements derived from the specifics of teacher studies.

Before sketching the concept of constructing relatively optimal tools for didactic measurement, the following concepts require clarification: learning effectiveness, scope of education, level of education, constancy of learning outcomes and a comprehensive indicator of student's competence.

The distinguished categories of learning outcomes (W – U – Z) are global and thus require the definition of specific partial indicators relating to individual criteria describing the diagnosed competences of the student (pupil). In this way, we come to the classification, ordering and also showing the interrelationships between the structural components of the student's competence within one of the subjects studied. Schematically, it can be expressed in the form of the following statement:

- 1) *Knowledge – scope, level and constancy,*
- 2) *Skills – scope, level and constancy,*
- 3) *Social behavior (competence) – scope, level and constancy.*

Let's take a closer look at the indicators appearing in all categories, which are: scope, level and constancy. We will do this first in relation to knowledge.

The scope of knowledge means the quantitative characteristics of the concepts (most importantly understood) adopted by the student. We assume that in education we strive for a state in which every normal (without development deficits) entity has acquired all the basic concepts and facts outlined by the requirements of a given subject or educational program (detailed syllabus of the subject of study). Ignorance of the concept, e.g. "attention" may prevent further effective learning related to this concept, and in the course of studying may even exclude student's activity in diagnosing attention as a mental process of the chosen individual case, e.g. a child starting education in th 1st class.

The level of knowledge is most often understood as the volumetric characterization of the pupil (student) discernment based on the knowledge

of a given concept, which takes into account the evaluation of the multiplicity of complementary elements determining the wisdom of that pupil (student). Due to the breadth of knowledge centered around a given term – the concept (fact) can be distinguished and determined hierarchical levels of knowledge on a scale adequate to school (academic) grades . In this context, the following levels of knowledge can be distinguished as a component of pupil-student competence.

a) The level of reproduction of facts – the student uses all concepts on the principle of reproduction in the basic range of remembered (with understanding or not) knowledge (sufficient grade);

b) Level of fact handling – the student uses all concepts with simultaneous exemplification on the basis of literature or own experience (satisfactory plus grade);

c) Analytical level – the student analyzes with elements of comparison and generalization with the use of concepts in relation to practical situations of a typical nature (good grade);

d) Analytical and synthetic level – the student quite efficiently performs analyzes and syntheses using concepts in relation to practical situations of an atypical nature (good plus grade);

e) Level of creative knowledge – the student freely performs analyzes and syntheses with using concepts in relation to practical situations of an unusual nature and designs their own (partly creative) solutions (very good grade).

Similarly, refer to the hierarchy of criteria in the other two categories, namely skills and behavior. Because far-reaching similarities to the hierarchy presented above we refrain from discussing them in detail. However, it should be emphasized that all categories of learning outcomes are subject to evaluation procedures (evaluation or self-evaluation) while respecting the standards, which in each case are: scope, level and stability.

Regarding the criterion of constancy, it should be noted that in the practice of final qualification of student competences this criterion is usually not taken into account. The justification for this approach may be that the student takes the exam (credit) immediately after a period of

intensive preparation for it and thus it is difficult to objectively determine how long the acquired knowledge will be remembered. In our concept, the indicator of the constancy of shaped competences can be determined in the following cases:

1) in all stages, especially in the final phase of the educational process according to the classically defined didactic principle of constancy,

2) the competences shaped in one subject of study are multiplied in studying other subjects (*cross-subject correlation*) and

3) when the subject is continued in the next semesters of education (*intra-object correlation*)

Of course, the criteria presented above require careful clarification due to the assumptions and specificity of each subject of education at school or university. The care for clarity and measurability of the records results in the creation of specific didactic measurement tools that take into account all distinguished criteria and categories of qualification and verification of learning outcomes on the side of each student (pupil) as fully as possible.

Depending on the nature of the subject of education and the forms in which it is implemented, a synthetic formula is determined establishing the algorithm for determining the student's comprehensive competence index (SWK). If in the study plan a given subject is implemented in the form of lectures as well as exercises in connection with the system of pedagogical practice at school, and the nature of the subject is interdisciplinary and also has a high coherence rate – a high rank should be assigned to the following spheres: instrumental as well as the active participation of students in classes at the university and at school during apprenticeship. No less importance should be attached to the student's own work in studying literature (indicated and chosen at the student's own discretion).

The synthetic index (SWK) comprehensively expresses the sum of all partial indicators taking into account the agreed proportions between the ranks of knowledge (*a*), skills (*b*) and social behavior (*c*) student's. For example, this can be illustrated on the subject of "psycho-pedagogical diagnosis", which occurs in the author's academic work. In constructing

the syllabus of this subject in consultation with students of distinguished ranks a , b , c the following values have been assigned:

$$a = 45\%, b = 35\%, c = 20\%.$$

It should be noted that there is equality in every case $a + b + c = 100\%$.

The above parameters reflect the rank of individual planes of the subject of education (WUZ) taken into account in determining the student's assumed competences. Psycho-pedagogical diagnostics is the subject that is the canvas for shaping the broadly understood methodological competences of future teachers (e.g. children). Hence, the rankings of knowledge (45%), practical skills (35%) and social competences (20%) were assigned in that way. One should agree that there are no clear and objective proportions between ranks a , b and c . Hence, it is advisable that the solutions to this issue in each case were treated in the dialogue between the lecturer and students.

From the theoretical foundations of didactic metrology (docymology), there are premises for determining a synthetic indicator (SWK) characterized by a system approach. In the course of our many years of research, the concept of student evaluation and evaluation – as a future teacher – has been developed and verified. Diagnosis of student's achievements during the exam (taking into account his progress throughout the semester) included all of the above-mentioned elements that were as far as possible devoid of the characteristics of harmful score-mania or test-mania.

In view of the considerations made on the basis of longitudinal studies, we come to the determination of a synthetic indicator of student's competence, which is expressed by the following formula:

$$\mathbf{SWK} = \mathbf{a} \times \mathbf{W} + \mathbf{b} \times \mathbf{U} + \mathbf{c} \times \mathbf{Z}, \text{ where } \mathbf{a} + \mathbf{b} + \mathbf{c} = 1 \text{ (100 \%)}$$

W – partial indicator in the knowledge category,

U – partial indicator in the skill category,

Z – partial indicator in the category of social competences (behaviors).

In view of the adopted methodological assumptions, in the further procedure of determining the level of education quality on the student's

side, the comprehensive index obtained by him should be assigned to a given range determining the grade according to the scale defined in the study regulations. The SWK index can take values from the range $\langle 2; 5 \rangle$ and on this basis it can be used to determine the final grade in a given subject.

The SWK determination procedure requires the teacher to perform ongoing diagnostics in the course of teaching, and to take into account all distinguished components, which in total will determine the qualification of each student's achievements and their final assessment. Of course, you cannot ignore the elements of self-control, self-correction and self-assessment on the part of individual students. Student's competences in self-control as well as self-corrections and self-assessments are the primary component of the synthetic competence index in general.

Developing tools for measuring the quality of education is the subject of many years of research and design work in a team of academic teachers and participants of a scientific seminar under the guidance of the author of this article. Students of "pedagogy" are included in the process of creating research tools and didactic measurement tools, and members of student research clubs actively participate in this field. Classes with students include the construction of measurement tools and their empirical verification in connection with the implementation of the following subjects of study: psychopedagogical diagnostics, modeling of elementary education space, theory and methodology of elementary education of a child, shaping the child's competence in the context of the core curriculum, methodology of social research and finally evaluation in education kids. Our research has proved that it is worth including students in the current of research trials to improve the quality of education of children and their teachers. This is particularly important and significant in shaping the competences of future teachers in the fields of humanities and language and literary education.

CONCLUSIONS

The methodology of measuring and evaluating effects obtained in the process of educational classes in contemporary school is gaining importance and will probably continue to do so. In the search for better quality in/of education of tomorrow we encounter a significant gap between theory and implementation in educational practice. For this reason, it turns out that it is necessary to conduct more extensive didactic research (including that of diagnostic and experimental nature) on the quality of education and teachers' education, which requires constructing qualitative tools for measuring the effects of education (and upbringing). The question of performing teaching roles in the education of students getting ready to work as teachers in the system of pedagogical practice becomes particularly significant.

In practice the activity of students is quite often reduced to tedious cramming of the educational content not always useful in their professional work. Student internship at school and practical classes at the university should be closely correlated, fully focused on shaping competencies necessary to perform multiple tasks and responsibilities – in order to perform competent and responsible roles in teaching work²⁷.

Identifying (complaining on) or even justifying something that is imperfect or even bad in education is not enough. We need strong, competent and responsible cooperation of all educational entities oriented towards actual changes for the better. This applies to, among others, the design of research on qualitative didactic measurement tools, as well as experimental research related to issues concerning diploma theses, especially at the level of master's studies. It is an extremely responsible task faced by both school and academic didactics. All school and academic teachers should be reciprocally supported and assisted in their didactic and educational activities. This however will not be possible if didactics as

²⁷ See e.g. J. Grzesiak, *Niepokój o dydaktykę w procedurze ewaluacji edukacji i nauk o niej*. In: J. Grzesiak (eds.), *Ewaluacja i innowacje w edukacji*. Kalisz – Konin 2014; J. Grzesiak, *Syntetyczny wskaźnik kompetencji uczniastuży poprawie jakości edukacji – kiedy ?* In: J. Grzesiak (eds.), *Narzędzia pomiaru efektów kształcenia*. Kalisz 2016.

pedagogical subdiscipline will be underestimated in the first place by theoreticians and academic teachers, who perform responsible roles of teachers of future teachers. The idea is not to allow undermining or even losing the identity of didactics as a leading subdiscipline of pedagogy, integrally connected with detailed didactics and various forms of pedagogical practice. This is particularly important in the view of the challenges posed by education in the scope of humanities in the linguistic and cultural context.

General didactics, including didactic design, as subject of pedagogical studies, should constitute a thorough base consisting in theory of knowledge and utilitarian skills for shaping students' competences in the area of pedagogical methodology, taking into account the specificity of the subject and the level of education. It depends mainly on teachers teaching didactics as well as on teachers – methodologists, between whom there should be closer cooperation and correlation.

Studies of didactic sources constitute a special scientific canvas for discourses and meditations on, inter alia:

- past changes in various areas of education resulting from the influence of the teacher's methodical behavior – both in relation to theory and school practice,

- what should be changed in the didactic measurement so that there is undoubted pedagogical progress as a measure and at the same time as an indicator of improving the quality of education in general.

Continuing didactic discourses and disseminating good publications among teachers and students is indispensable for further pedagogical day-to-day progress in all schools and universities. Individual actions and research or innovative attempts undoubtedly have social significance, but only coherent, extensive activity of all school and academic teachers can make the problem of determining a synthetic indicator of pupil- student competence considered in this article become an important step forward in improving the quality of education in each school and at each university.

SUMMARY

In the article, the author engages in scientific and to large extent methodological considerations regarding the improvement of the quality of education in the scope of humanities (including language) in the context of the quality of didactic measuring tools. He is in favor of designing genuinely better methodological solutions leading to an actual increase in the effectiveness of shaping the competences of pupils and students. Moreover, he presents theoretical and methodological premises for the construction of high-quality didactic measurement tools on the basis of which innovative works can be conducted aimed at improving the quality of education. In this context, there is a need for qualitative change for widespread and continuous innovation in education and correlated sciences. It is a very responsible challenge for educators, teachers and practitioners who are decisive for the sense and authentic values inherent in everyday live education.

The structure of the discourse includes sequences devoted to the following issues: clarity in the formulation of educational goals at the basis of designing improvement of education quality, design in educational processes as subject of scientific research, design and evaluation in education in the light of original research, specificity of measurement and indicators of improving quality of humanistic education, concept for determining a synthetic competency indicator (pupil – student).

The basis for determining the quality of education, especially in the scope of humanities (including language education) in the era of transformation processes, should consist in its goals, expressed in clear formulations of functions, activities and detailed methodological and organizational tasks. Such formulas should at the same time clearly set measurable results as assumed specific competences of individual pupils (students). It has been proved in the article that in the pursuit of improving the quality of education, teaching (at both schools and universities) should be prioritized towards assumed operational goals, which in reality can be treated as assumed effects in the form of changes in competences (of the pupil – student) for richer and more perfect. However, goals should not be identified with teaching outcomes.

Based on the set operational goals and ongoing psychological and pedagogical diagnostics of individual pupils / students it becomes possible to design the course of phased educational processes. These processes should, by definition (and set goals), trigger change in every learning subject, and that in turn requires reliable diagnosis based on *stimulus – reaction – effect* type of feedback. The article features original concept of comprehensive day-to-day didactic measurement entitled ‘synthetic competence indicator’. Theoretical considerations were supported with examples and interpretations in the context of the author’s long-term research.

Finally, the author presents valuable demands and challenges in the name of improving the quality of education, especially in the scope of humanities (including linguistic and cultural education). The author also pays particular attention to the importance of the quality of educating competent and responsible teachers, who thanks to acquired competences will be able to cope with the requirements and tasks. These challenges also apply to academics and academic teachers, especially those appointed as teachers of (future) teachers.

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