



EFFECTIVENESS OF VOCATIONAL EDUCATION AND TRAINING FROM THE PERSPECTIVE OF FORMAL AND LEGAL CHANGES – ANALYSIS OF EXTERNAL FACTORS (PART 1)¹

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Abstract. The article (part 1 and 2) presents the results of the research into external and internal factors contributing to the increase in the effectiveness of vocational education and training, and to preparing future graduates of vocational schools for entering the labour market. The analysis was made in the context of the changes observed in vocational education and training in the years 2012–2016, taking into account the reform of the education system introduced on 1 September 2017.

The identification of vocational qualifications in order to make it easier for students to acquire the learning outcomes defined in the core curriculum for training for particular occupations was the main feature of the new model of vocational education and training introduced in 2012.

The Integrated Qualifications System, which aims to bring vocational education and training closer to the labour market, plays a special role here. The article discusses the issues of the Integrated Qualifications System, which ensures the comparability of qualifications awarded in Poland with those acquired in other EU Member States. Shaping the system of education, and vocational education and training in particular, by adopting legal regulations gives rise to the following questions: *To what extent can formal and legal changes impact on social and educational reality? Can you change the world with reforms?*

¹ In the first part of the article, external factors are analysed, whereas in the next issue of the *Szkoła – Zawód – Praca* magazine (2.2021), the second part of the article will be published, in which internal factors will be discussed.

Do subsequent reforms bring a positive change? Does the system of education become more effective thanks to them?

EFEKTYWNOŚĆ PROCESU KSZTAŁCENIA ZAWODOWEGO
Z PERSPEKTYWY ZMIAN FORMALNOPRAWNYCH –
ANALIZA CZYNNIKÓW ZEWNĘTRZNYCH (CZĘŚĆ I)²

Słowa kluczowe: plany i programy nauczania, Zintegrowany System Kwalifikacji, porównywalność kwalifikacji, efekty uczenia się (wiedza, umiejętności, kompetencje)

Streszczenie. W artykułach (część I i II) przedstawiono wyniki badań dotyczące czynników zewnętrznych i wewnętrznych mających wpływ na zwiększenie efektywności kształcenia w zawodach oraz przygotowania absolwentów szkół zawodowych do rynku pracy. Analizę przeprowadzono w kontekście przemian w edukacji zawodowej w latach 2012–2016 z uwzględnieniem wdrażanej od 1 września 2017 roku reformy systemu oświaty.

Założeniem wprowadzonego w 2012 roku modelu kształcenia w szkolnictwie zawodowym było wyodrębnienie kwalifikacji w zawodach celem ułatwienia uczniom osiągnięcia efektów kształcenia określonych w podstawie programowej. Szczególną rolę odgrywa Zintegrowany System Kwalifikacji, którego ideą jest powiązanie kształcenia zawodowego z rynkiem pracy. W artykule poruszono kwestie Zintegrowanego Systemu Kwalifikacji, który stwarza możliwość porównania kwalifikacji uzyskanych w Polsce z kwalifikacjami nadawanymi w innych państwach członkowskich Unii Europejskiej. Modelowanie systemu oświatowego, w szczególności kształcenia zawodowego przez regulacje prawne skłania do pytania: *Do jakiego stopnia zmiany formalnoprawne mogą zmienić rzeczywistość społeczną, rzeczywistość edukacyjną? Czy reformami możemy zmienić świat? Czy rzeczywiście korzystną zmianą są kolejne reformy a system oświatowy zwiększa swoją efektywność?*

Introduction

Formal and legal conditions are enforced, this is why the way they are introduced matters a lot. Comparison of opinions of headteachers of vocational schools operating in Warsaw and in other localities outside Warsaw indicating the significance of differences will make it possible to determine the extent to which the responses vary depending on geographical location of a given

² W pierwszej części artykułu analizowane są czynniki zewnętrzne, natomiast w kolejnym numerze czasopisma „Szkoła–Zawód–Praca” (2.2021) ukaże się druga część artykułu, w której omówione będą czynniki wewnętrzne.

school. Two groups of factors, external and internal ones, were adopted as the determinants and criteria for the division. Headteachers' work is affected by external factors, such as formal and legal ones, and by internal factors resulting from local conditions.

This article discusses the external context, i.e., the institutional one, which is obligatory and determined by the education and EU law. The other context involves the principles of operation defined by the school, i.e., internal regulations resulting from the school's activity.

The first external factor refers to the commonly accepted formal and legal changes that impact on education and employment efficiency. These include changes in education law concerning the organisation of school work, i.e.: school plans and curricula. Moreover, an important change was the introduction of the Act on the Integrated Qualifications System, which allows comparability of qualifications and making a reference to specific learning outcomes (knowledge, skills, personal and social competences).

The success of the reform, education effectiveness and school graduate employability lie in the hands of headteachers who are responsible for implementing the changes. So, it is worth knowing the headteachers' opinions on that matter.

The main aim of the article is to analyse the opinions of headteachers of vocational schools operating in Warsaw and other localities on formal and legal changes. The subject matter of the study is to determine the importance of these changes for the effectiveness of vocational education and training.

The following will be analysed in the article:

Problem 1: What are the opinions of vocational school headteachers on introduced formal and legal changes? How do introduced changes affect the effectiveness of education?

Problem 2: To what extent do formal and legal changes introduced depend on the social environment in which schools operate? To what extent does the locality set the boundaries for formal and legal changes?

Local conditions include locality understood as a division into the capital city of Warsaw Warsaw and other counties located around Warsaw. Capital city status and the proximity of inspection bodies, coupled with greater accessibility of schools to entrepreneurs and more opportunities for implementing learning outcomes as compared to neighbouring counties justify the analysis in the context of formal and legal changes under implementation.

Formal and legal changes, and effectiveness of vocational education and training

The changes that are being introduced to vocational education and training in Poland aim at increasing the effectiveness of education and better preparing students for entering the labour market. This task requires many important alterations, e.g., in school plans and curricula, hiring practitioners, and establishing cooperation with employers. These activities will result in the development of vocational schools.

“Literature on pedagogy views school development as a process of learning by people and organisations. It justifies the need for constant redefinition of school and emphasises the category of change. However, there is a problem, which results from the inability to define clear proportions between what is constant at school (and decides about the continuity and stability), and what is subject to change and affects its dynamics as an institution, and educational microsystem at the same time” (Nowosad, 2018, p. 77).

Striving for the quality of education in reforming, discussing and reorganising the system of education, Joanna Madalińska-Michalak emphasizes that „The core of the emerging education model is the concept of *standards - outcomes*. [...] Quality begins to mean the effective achievement of standards, and standards seem to reflect what society wants to obtain from education in return for the investments made in it” (Madalinska-Michalak, 2011, p. 42). This new model of education requires a new way of looking at schools, improving the quality of school work, new teaching methods and new forms of learning. Evaluation of school’s work is subject to the evaluation of school’s performance.

The term ‘standard’ is used here in relation to achievements, outcomes, sophisticated tasks or secondary school leaving examinations, and these leading to the award of qualifications. With regard to curriculum, “the expected student attainment is determined as the expected standard for students’ activity (National Curriculum, 1995, p. 5).

Jacek Piekarski expresses his doubts about applying the laws of free market to education. “Market-oriented quality of education’ is expressed in measurable terms, and based on existing benchmarks, standards and sets of requirements” (2013, p. 49).

The author expresses his concern about the situation

„in which knowledge becomes a commodity and education a service, because it makes the barter value of knowledge the most important parameter of its quality, putting it in a clearly privileged position. It also fosters the development of predominant criteria, which are convenient in knowledge management, because they are measurable and comparable within bureaucratic structures” (Piekarski, 2013, p. 49).

Other challenges relating to comparability and the possibility for agreeing on different values, e.g., economic, religious and aesthetic or moral dilemmas can stem from that.

Understanding the quality of knowledge is increasingly linked to the category of interest, institutional objectives and organisational solutions, bringing „the concept of quality to effectiveness and makes these terms even synonymous” (cf. Piekarski, 2013, p. 50).

A similar view is expressed by Eugenia Potulicka, who believes that the introduction of accountability “is a more political than educational fact; it makes education less democratic” (Potulicka, 2010, p. 180). According to the author, accountability shifts control over education, changes the definition of public education, and distances society from the management of education. It also limits public access to school management and public discourse about the goals of education. “The language of accountability is the language of capitalism, whose cultural attribute is to measure everything (Apple, 1993, p. 5; Buttlerfield, 1995, p. 214; McNeil, 2000, p. 260 et al.)” (Potulicka, 2010, p. 180). Public education is viewed by neoliberals as an unproductive consumer of public funds.

Tadeusz Kotarbiński wrote about effective and rational action in “Traktakt o dobrej robocie”. Praxeology as a general theory of efficient action is the search for conditions on which maximising efficiency depends (cf. Kotarbinski, 1969, p. 433). Increasing efficiency and effectiveness of action depends on practical experience, achievements, and effort of countless entities. This experience can be used in two ways: by drawing generalisations from the observation of facts or by adopting the generalisations of others into one’s system (cf. Kotarbinski, 1969, pp. 8-9). The aim of praxeologists is to make inquiries into the widest possible technical generalisations. This stands for the technique of good work as such, indications and warnings important for any effective action (cf. Kotarbinski, 1969, p. 7). To arrive at effectiveness: “Sometimes, however, it is important to put questions that can outline a perspective on the analysis of conditions and possibilities for improving complex educational practice” (Piekarski, 2013, p. 51). I think it is worth addressing questions to headteachers of technical

and vocational schools, who on the basis of their broad experience can present relevant comments and conclusions. The input from practitioners is of value in the reformed system of education. Similarly to the exchange of experiences, the opinions of headteachers can serve as a voice in the discussion about the model of effective vocational education and training.

Change is a key element contributing to the development of vocational schools. This view was presented by Inetta Nowosad who highlighted the global impact of change on school development: „the direction of changes at schools is determined by social, economic and political relations in a given country. It is also dependent on international situation” (Nowosad, 2018, pp. 76-77). The author emphasised the role of external and internal factors in all developmental changes understood as mechanisms, whose “influence varies and depends on the moment they occur and the level at which a given object is to be found. As a result, these factors trigger a quantitative and qualitative development process, and also have an impact on its orientation” (Nowosad, 2018, pp. 76-77).

Professional development of teachers is an unquestionable qualitative factor and, at the same time, an indispensable element of school’s development discussed by Joanna Michalak-Dawidziuk. This factor is solely dependent on personal aspirations and at the same time “constitutes an important part of an individual’s life” (Michalak-Dawidziuk, 2018a, p. 382).

External factors include formal and legal changes in the way school’s work is organised, i.e., school plans and curricula. Moreover, significant changes resulting from the Act on the Integrated Qualifications System were taken into account. The Act aimed to boost employability on the domestic/international labour market and to increase the effectiveness of vocational education.

Initial training preparing for an occupation and being active on the labour market is the aim of vocational education and training, which is stipulated in the above-mentioned law and EU guidelines (cf. *Secondary Vocational Education International Experience*. Final Report, 2015, p. 21).

The effectiveness of vocational education and training is one of the factors enabling the preparation for effective employment and operation on the labour market. The aim of the 2012 reform was to provide vocational school students with knowledge, skills and personal and social competences described in accordance with the idea of the European Qualifications Framework, expressed in terms of learning outcomes, including:

“- learning outcomes common to all occupations, including personal and social competences,

- learning outcomes common to occupations within a given area of training, which forms a basis for training in an occupation or group of occupations,
 - learning outcomes relevant for qualifications identified for individual occupations” (Regulation of the Minister of Education of 7 February 2012 on the core curriculum of education in occupations (OJ 2012, item 184), cf. Reform of vocational education and training in Poland, 4 December 2012. MEN³).

It is justified to monitor formal and legal changes, which have an impact on increasing the effectiveness of education and the actions taken by the schools.

General characteristics of the analysed external factors contributing to the effectiveness of education in occupations and employment of graduates of vocational schools in the labour market

The factors that favour the effectiveness of education and employment of vocational school graduates in the labour market are discussed below. A distinction between external and internal factors has been made. Internal factors, as mentioned earlier, will be discussed in the second part of the article, which will be published in the next issue of Szkoła-Zawód-Praca.

External factors affecting the effectiveness of training in occupations, employability and mobility of vocational school graduates in the labour market are presented in the analysis below.

Table 1. External factors contributing to the effectiveness of training for occupations and employability of vocational school graduates on the domestic and international labour markets

<p>External origin</p> <ul style="list-style-type: none"> - formal and legal changes from the point of view of education efficiency and employability <ol style="list-style-type: none"> 1. Amendment of education law and, in particular, the way school work is organised: <ol style="list-style-type: none"> a) school plans b) curricula; 2. Integrated Qualifications System: <ol style="list-style-type: none"> a) boosting employability on the national/international labour markets (comparability of qualifications), b) reference to specific learning outcomes (knowledge, skills, competences).

Source: Author.

³ Now the Regulation of the Minister of National Education of 15 February 2019 on general learning objectives and tasks of training for sectoral vocational education occupations and on the classification of sectoral vocational education occupations (OJ 2019, item 316), which does not repeal the previous one until the expiry of the education cycle.

Formal and legal conditions are a group of external factors that contribute to the effectiveness of training in occupations and employability of vocational school graduates in the labour market, which are not directly influenced by the schools. These include, in particular, education law and EU law. School plans and curricula play an important role in the education process.

Stanisław Dylak, who is a supporter of bespoke curricula, lists two arguments in favour of developing them, i.e.: changing expectations towards schools, which should continuously and quickly react to them with an appropriate curriculum. Secondly, the school is a meeting place for different worlds and experiences and different languages to describe these worlds and experiences, i.e., different cultural and axiological representations. “The school, regardless of the specific functions imposed on it, has always attempted to negotiate meanings, indicate values and encourage their adoption by students” (2000, p. 9).

“A bespoke school curriculum is an expression of a basic willingness to innovate, evaluate and guarantee quality, and school development is understood as continuous work on the development programme (Nowosad, 2008, pp. 194–195). The year 2016 was a special year for 4-year technical secondary schools due to the fact that it saw the first year of graduates of those schools who were educated in accordance with the 2012 core curriculum developed from the perspective of learning outcomes. The Regulation stipulates that knowledge, skills and personal and social competences that a learner acquires in the process of vocational education and training are described, in accordance with the idea of the European Qualifications Framework, in terms of learning outcomes. These include learning outcomes common to all occupations, including personal and social competences, learning outcomes common to occupations within an area of education, which forms the basis for training in an occupation or a group of occupations, learning outcomes specific to qualifications identified for occupations (Regulation of the Minister of National Education of 7 February 2012 on the core curriculum for training for particular occupations (OJ 2012, item 184, as amended).

The Integrated Qualifications System has been in operation since 2015. This is another piece of legislation of importance to vocational education and training, which by referring to specific learning outcomes (knowledge, skills, competences), aiming at comparability of diplomas and certificates awarded in the European Union and promoting increasing the effectiveness of lifelong learning, brings it closer to the labour market and its requirements. The aim of the Act and other legal regulations is to create the possibility of obtaining additional

certification, primarily qualifications gained outside the system of education and higher education. In some schools it is possible to obtain additional certificates that are recognised on the labour market. This gives students the opportunity to obtain additional qualifications while still at school.

The Integrated Qualifications System is defined in Article 2(25) (OJ 2018, item 2153 as amended) as a distinct part of the National Qualifications System, which includes standards for describing qualifications and assigning levels of Polish Qualifications Framework to them; rules for incorporating qualifications in the Integrated Qualifications System and recording them in the Integrated Qualifications Register; and the rules and standards for qualifications certification and quality assurance in the scope of qualifications awarding, as specified in the act.

The results of the introduction of the Integrated Qualifications System (Article 4 of the Act of 22 December 2015 on Integrated Qualifications System (OJ 2018, item 2153, as amended)) include: quality assurance of awarded qualifications; the possibility of having learning outcomes obtained in informal education and learning recognised; the possibility of collecting and recognising achievements at stages; access to information about qualifications obtained in Poland; the possibility of comparing qualifications obtained in Poland with those awarded in the European Union.

Improving qualifications and developing competences promotes employability on the labour market and aims at achieving perfection in a given occupation. These factors contribute to professional development, which “is an aspiration to establish authority in professional circles” (Michalak-Dawidziuk, 2018b, p. 632).

In the pursuit for quality in vocational education and training, the achievement of learning outcomes and the mastery in occupation, it is important to achieve common criteria of comparability.

“In many countries, such criteria are determined, among other things, by professional standards, the equivalent of which in Poland are ‘standards of vocational qualifications/competences’ and at present ‘sets of information about occupations’ [...], which (*author’s note*) define a certain standard of requirements, *inter alia*, in terms of knowledge, skills and social competences, which employers expect from a candidate to work in a given profession. [...] The requirements that are set out in descriptions of occupations are the standards defined by the community, which must be observed, as otherwise it would prove that an employee

is incompetent and the results of their work are not of recognised quality” (Symela, 2018, pp. 619–624).

Both the education law and European guidelines are important factors that affect the education process. The dynamics of introduced changes and reforms of the system of vocational education and training require constant monitoring and ongoing analyses. Therefore, analysing the opinions of vocational school headteachers on the effectiveness of education and training of graduates of technical and basic vocational schools and their preparedness to enter the labour market in the context of implemented changes is justified.

External factors, i.e., formal and legal changes (part 1 of the article) and internal factors (part 2 of the article) understood as the tasks performed by the school to ensure the employability of its graduates will be analysed on the basis of the opinions of headteachers of schools offering training to IT technicians. Due to the fact that the headteachers of these schools are at the same time headteachers of basic vocational schools, their statements concerned the two types of schools.

The article is a voice in the discussion on vocational education and training in the context of dynamically changing education law and conditions of school operation, which largely depends on innovativeness and creativity of the school community, i.e., those directly concerned: school management, teachers and students.

Survey scope and methodology

The aim of the study was to become acquainted with the opinions of headteachers of vocational schools: technical secondary and basic vocational schools, on formal and legal changes that affect the work of vocational schools analysed from the perspective of school practice in the years 2012–2016. The subject of the study was the analysis of the results of formal and legal changes affecting the process of vocational education and training from the perspective of the realities of school practice in the years 2012–2016.

Efficiency of education means creating optimal conditions that promote employability. They include preparing young people for mobility in the labour market. The opinions of vocational school headmasters who are responsible for the education process are important. The aim is to know *how they assess changes introduced and legal regulations in force measured in terms of learning outcomes.*

What are the effects of these changes? How do changes make it easier for young people to enter the labour market? How well are young people prepared for mobility in the labour market?

Research problems include:

1. In the opinions of headteachers of vocational schools, how did formal and legal changes contribute to the effectiveness of education and employability in the labour market in the years 2012–2016?
2. In the opinions of headteachers of vocational schools located in Warsaw and outside the capital city, to what extent does the locality affect the commitment/activity of general, systemic formal and legal changes that have been introduced/implemented?

The survey was addressed to headteachers of vocational schools, which offer initial training to IT technicians. This choice resulted from the dynamics of changes observed in this occupation. The opinion of headteachers is important because in this occupation the need to meet the requirements of the rapidly changing labour market is bigger than in other occupations. Training for this occupation requires care for appropriate expensive software and hardware that meet current technological realities. This poses a challenge to headteachers working in under-invested schools.

The surveyed headteachers played a dual role as headteachers of secondary technical schools and basic vocational schools, obviously at these groups of schools where such types of schools operated alongside. The headteachers who agreed to participate in the survey expressed their opinions on the external and internal conditions affecting the preparation of prospective graduates for entering the labour market in the years 2012–2016.

The headteachers presented their opinions on the core curriculum for training for occupations (Regulation of the Minister of National Education, OJ 2012, item 184), which was written for the first time with the focus on learning outcomes with defining in part 2 learning outcomes common for all occupations, learning outcomes common for occupations within an area of study forming the basis for education in an occupation or a group of occupations and learning outcomes relevant for qualifications identified in occupations.

To administer the survey, a diagnostic survey method, desktop review, survey technique, and survey questionnaire were used (cf. Agresti, 2018, Chapter 6; Agresti, 2002, pp. 91–101; Falissard 2012, p. 67). The results of the surveys were presented in the form of numbers and percentages.

The survey was conducted in October 2016. The survey sample was composed of the headteachers of groups of upper secondary schools, in which training was offered in technical occupations, including IT technician. As of 30 September 2016, the total number of public secondary technical schools in the Mazowieckie Province was 192, while in the capital city of Warsaw (municipality) it was 46, including 10 secondary technical schools providing training for the occupation of IT technicians⁴. 57 headteachers (46 women and 11 men) of public schools located in Warsaw and counties neighbouring on Warsaw responded to the survey.

Headteachers of school located outside Warsaw formed the majority of respondents, i.e., 60% (34 out of 57) of all the respondents. A large group of them - 44% (25 out of 57) - were headteachers of schools located in towns with a population up to 50 thousand. A small group of them (9%; 5 out of 57) were headteachers of schools located in cities with population above 500 thousand residents. An equally small group (7%; 4 out of 57) were headteachers of schools located in towns with a population ranging from 50 to 100 thousand inhabitants.

Headteachers of schools located in Warsaw formed the second largest group and accounted for 40% (23 out of 57) of all respondents. The answers given by the respondents were analysed and the results relate to the size of the survey sample.

It has been assumed that the opinions and actions taken by the headteachers of schools located in Warsaw do not differ from those of the headteachers of schools located outside Warsaw and that the differences are only the result of the randomness in the selected sample. To confirm this thesis, a statistical method of data distribution evaluation (Puchalski 1969, pp. 309-318) was used and calculated using the χ^2 test.⁵ This test helps to reject the zero hypothesis of no differences between comparable distributions.

⁴ Data obtained from the Information System on Education as of 30.09.2016, Department of Information and Government Programmes of the Education Office in Warsaw (08.10.2019).

⁵ The calculations made for the tables marked with** confirmed the thesis above.

Opinions of vocational school headteachers on the systemic formal and legal changes introduced in the years 2012-2016 in the context of the effectiveness of education and employability in the labour market, the degree of involvement, and the location of schools

External factors contributing to the effectiveness of training in occupations on the labour market in the opinion of vocational school headteachers

The following analysis concerns formal and legal changes considered as external factors favouring the effectiveness of training in occupations and employability of graduates of vocational schools in the labour market. What is the importance of the effectiveness of the introduced changes?

The first factor considered was the number of contact hours set out in the framework school plan. An important question was how many headteachers considered the number of contact hours resulting from framework school plan of a 4-year technical secondary school adequate.

Table 2. The percentage of headteachers who believed the number of contact hours (theory) and practical training resulting from the framework school plan of a 4-year technical secondary school was adequate**

Type of training	Percentage of headteachers who believed the number of hours was adequate		
	Warsaw N = 23	Outside Warsaw N = 31	total N = 57
vocational education (theory) (735 hours)	96	74	83
practical vocational training (735 hours)	57	42	48
No answer	2	1	3

Source: Author.

As far as vocational education (theory) is concerned, the vast majority of headteachers (83%) considered the number of hours taught as part of the framework school plan of technical secondary school adequate to effectively prepare

the graduates for entering the labour market. Only 17% of the headteachers did not agree with that. The result obtained serves as a confirmation that the number of contact hours as part of vocational education (theory) was adequate.

The headteachers' opinions on the number of contact hours as part of practical training were divided. In the case of practical vocational training, a large group of headteachers (52%) considered the number of contact hours as insufficient, but an equally large group of headteachers (48%) believed that this number of hours was adequate.

As far as vocational education (theory) is concerned, the headteachers of vocational schools were satisfied with the number of hours taught resulting from the framework school plan of technical secondary school, which is needed to prepare the graduates for entering the labour market. However, the surveyed headteachers believed that the number of contact hours as part of practical vocational training was not sufficient.

It should be noticed that a higher percentage of headteachers of schools located outside Warsaw considered the number of hours devoted to both theoretical and practical part of vocational training insufficient.

The differences were statistically significant at the assumed level of significance $\alpha = 0.05$. The implementation of curricula is another important external factor in the process of education, subject to formal and legal changes.

Table 3.** Opinions of headteachers of vocational schools located in Warsaw and outside Warsaw on types of implemented curricula

Types of curricula implemented in schools	Percentage of headteachers indicating a given type of implemented curricula		
	Warsaw N = 23	Outside Warsaw N = 34	Total N = 57
KOWEZiU	74	82	79
Bespoke	43	26	33
Developed by publishers	26	12	18
Modular	-	21	12
Other	-	9	5

Source: Author.

The vast majority of headteachers (79%) stated that teachers of vocational subjects teach curricula developed by KOWEZiU (National Centre for Supporting

Vocational and Continuing Education), while one third (33%) stated that bespoke curricula were developed at their schools. A small percentage (18%) of respondents declared that their schools implemented curricula developed by publishers. An even smaller number of schools implemented modular curricula (12%). Only 5% of headteachers worked on the basis of other curricula. Speaking freely, the surveyed headteachers did not indicate which curricula were used by teachers of vocational subjects. The aim of the vocational education and training reform introduced in 2012 was to enable teachers to develop bespoke curricula. This was not confirmed by the opinions of the surveyed headteachers of vocational schools, because only 1/3 of the schools implemented bespoke curricula. It should be noted that schools in Warsaw much more frequently implemented bespoke curricula, which was reflected in the 20% difference in the answers given by the headteachers of schools located in Warsaw and outside the capital. In this case, locality impacted on the answers given. Headteachers of schools located outside Warsaw indicated a greater use of curricula developed by KOWEzIU and modular ones, but the differences were not significant.

The Integrated Qualifications System was another important element of bringing vocational training closer to the labour market, which resulted from the EU law.

Table 4.** Employment of graduates on the domestic/international labour markets after the implementation of the Act on Integrated Qualifications System in the opinions of headteachers of vocational schools located in Warsaw and outside Warsaw

Responses	Percentage of headteachers who indicated the impact of the IQS Act on the increase in employment of graduates		
	Warsaw N = 23	Outside Warsaw N = 34	Total N = 57
YES	70	62	65
NO	22	18	19
I don't know (open answers)	8	20	16

Source: Author.

The majority of headteachers (65%) confirmed that the Integrated Qualifications System would contribute to greater graduate employability in the domestic/international labour markets, while the remaining ones (35%) were of the opposite opinion. Moreover, when answering open questions, 16% of the headteachers

responded with: “I don’t know”, “it’s hard to say”, and one responded wrote: “young people are confused anyway”.

The quantitative distribution of responses of headteachers of school located in Warsaw and outside Warsaw was comparable.

The headteachers’ opinions on the Act on the Integrated Qualifications System were important in terms of increasing the effectiveness of training for occupations.

Table 5.** The opinions of headteachers of vocational schools located in Warsaw and outside Warsaw on learning outcomes for occupations after the implementation of the Act on Integrated Qualifications System

Type of learning outcomes for occupations after the implementation of the Act on the Integrated Qualifications System	Percentage of headteachers who positively assessed the impact of the IQS Act on learning outcomes		
	Warsaw N = 23	Outside Warsaw N = 34	Total N = 57
School graduates will be in greater demand among employers	65	53	5
School graduates will be in greater demand among international employers	9	21	16
Employment of graduates on international labour markets will increase	9	18	14
The comparability of qualifications in different fields at home and internationally will increase	13	26	21
It will not make any difference	26	21	23

Source: Author.

In the opinion of the headteachers, the Act on the Integrated Qualifications System would contribute to increasing the effectiveness of training in occupations mainly thanks to increased employers’ interest in hiring school graduates (58%). A small group of headteachers (21%) believed that there would be greater comparability of qualifications earned in different fields at home and abroad, while 23% of headteachers believed that this would not make any difference. In an open question, despite the opportunity to do so, no headteacher presented their opinion on this topic.

There were small quantitative differences in the responses of headteachers of schools located in Warsaw and outside the capital city. Headteachers of schools located outside Warsaw were more optimistic that: demand for graduates among

international employers would grow, along with the employment of graduates on foreign labour markets and the comparability of qualifications in different fields, both at home and abroad.

Conclusion

The article presents the most important challenges concerning the importance of the ongoing formal and legal changes for the effectiveness of vocational education and training in the years 2012–2016. The impact of the results of these changes on vocational education and training was analysed. The views of vocational school headteachers on the systemic formal and legal changes introduced in the years 2012–2016 in the context of the effectiveness of training and employability in the labour market, the degree of their involvement, and with taking into account the location of schools, were presented.

External factors include formal and legal changes introduced in the years 2012–2016 in the context of education efficiency and employability in the labour market.

The opinions of the surveyed vocational school headteachers confirmed that formal and legal changes introduced in the years 2012–2016 and the adopted direction of educational reforms in place from 2012 in vocational education and training were the right ones.

The analysis of external factors confirms that the headteachers positively assessed the number of contact hours provided as part of vocational education (theory) specified in the framework school plan for technical secondary schools, which were needed to prepare the graduates for entering the labour market. The changes resulting from the introduction of the Act on the Integrated Qualifications System contributed to the effectiveness of education. In the opinion of surveyed headteachers, this fact will contribute to increased employability and comparability of employment on the national/international labour markets and employers' demand for graduates of their schools.

As weak points, the headteachers pointed out the insufficient number of contact hours as part of practical training, the use of curricula based on ready-made templates, mainly these developed by KOWEzIU, which stood for the lack of teachers' involvement in the development of bespoke curricula. In the opinion of vocational school headteachers, from the perspective of the years 2012–2016, the assumptions resulting from the implementation of the 2012 core curriculum for training in occupations should be made more practical.

The adopted strategy brings vocational education and training closer to the labour market and employers, but the actions taken definitely require cooperation with employers.

As far as external factors are concerned, the headteachers of vocational schools pointed out the insufficient number of contact hours of practical vocational training resulting from the framework school plan.

In conclusion, it should be stated that the schools require “much deeper reforms that would affect the socio-cultural status of educational practice and create mechanisms for the development of schools” (Piekarski, 2013, p. 52; Piekarski, 2011, pp. 29–57). These will contribute to building a school that is open to change, ready for continuing learning, and uses and generates knowledge based on the accumulated experience of all participants in the education process. Such a school model fosters rational relationships, including bringing education closer to the labour market.

When designing a new model of education, it is also worthwhile to refer to the shaping of young people’s attitudes in vocational schools, which refers to preparing them for their future work, operating in the labour market, and shaping their personal and family life. “In an era of commercialisation and competition, the reference to values is particularly important because it is the essence of human action, thinking and reflection” (cf. Kust, 2019, p. 91).

The above analysis leads to reflection on how to introduce formal and legal changes, especially in the vocational education and training sector.

The 2012 modernisation of vocational education and training prevented vocational school graduates from continuing their training for occupation in technical secondary schools. Completing secondary education was only possible by completing relevant vocational qualification courses or by joining the second class of a general secondary school for adults (Maciej Kopeć, Undersecretary of State at the Ministry of National Education, response to a parliamentary question No. 8652 concerning changes in education leading to its deformation).

In 2017, another reform of the education system was introduced. The main objective of the statutory changes was to “try to solve the problem of the mismatch between vocational education and the needs of the labour market, which causes difficulties both for employers to hire employees, and for graduates to find a job” (Osiecka – Chojnacka, 2018, p. 2).

A social challenge has been to build a positive image of vocational schools in the eyes of the public, “both at the level of secondary schools and sectoral

vocational schools offering apprenticeship in blue collar jobs, for which there is a high demand on the labour market” (Kust, 2020, p. 211).

You should look with a reserve at the shaping of the education system by introducing formal and legal changes alone. An important question should be asked: *To what extent can formal and legal changes impact on social and educational reality?* Can you change the world by regulating it? If yes, how can you do it?

The changes introduced by the formal and legal system, and the view that the more changes the more efficient the system becomes, seem to be a superficial approach. Introducing subsequent changes without taking into account an in-depth analysis, context, and involvement of the community causes misunderstanding and difficulties in their interpretation and implementation. “The teaching profession involves a lot of stress resulting from numerous reforms of the education system, imposing new tasks and causing serious fears concerning the security of employment due to changes in the structure of the system of education” (Michalak-Dawidziuk, 2018c, p. 534). An additional challenge is posed by the dynamics of the amendments of education law. To what extent is the frequency of these changes justified? It is therefore worth taking into account a broader context of the formal and legal changes introduced, and include the perspective of the effectiveness of the vocational training process.

When modernising the system of education, and vocational education and training in particular, it is advisable to reflect more deeply on whether further reforms are really beneficial and whether further changes bring more confusion.

References

- Agresti, A. (2018). *Statistical Methods for the Social Sciences, Fifth Edition*. Boston Mass: Pearson.
- Agresti, A. (2002). *Categorical data analysis*. Second edition. New York: Wiley.
- Falissard, B. (2012). *Analysis of Questionnaire Data with R*. Boca Raton, FL: CRC Press.
- Dylak, S. (2000). *Wprowadzenie do konstruowania szkolnych programów nauczania*. Warszawa: Wyd. Szkolne PWN.
- Jeruszka, J. (ed.). (2012). *Modernisation of methods and forms of vocational training in Poland. Diagnoza i oczekiwane kierunki zmian*. Warszawa: IPiSS.
- Kotarbiński, T. (1969). *Traktat o dobrej robocie*. Wrocław–Warszawa–Kraków: Ossolineum.
- Kopeć, M., *Odpowiedź na interpelację poselską nr 8652 w sprawie zmian w edukacji prowadzących do jej deformacji*, z dnia 30.01.2017 roku, <http://www.sejm.gov.pl/Sejm8.nsf/InterpelacjaTresc.xsp?key=6A132548> (31.01.2019).
- Kust, I., *Dziedzictwo kultury wartości w poglądach Uczniów Szkoły Lwowsko-Warszawskiej jako wzorzec dla młodzieży szkół zawodowych*. Szkoła – Zawód – Praca, 18 (2019).

- Kust, I., *Vocational Education and Training the Light of the Reforms of Polish Education System in the Years 1999–2017*. Przegląd Badań Edukacyjnych, 30 (1). (2020), DOI: <https://doi.org/10.12775/PBE.2020.012>
- Kwiatkowski, S.M. (2018). *Kompetencje przyszłości*. W: S.M. Kwiatkowski (red.), *Kompetencje przyszłości*. Warszawa: Fundacja Rozwoju Systemu Edukacji.
- Madalińska-Michalak, J. (2011). *Przywództwo i jego wyzwania w warunkach kultury neoliberalnej*. W: S.M. Kwiatkowski, J. Madalińska-Michalak, & I. Nowosad (red.), *Przywództwo edukacyjne w szkole i jej otoczeniu*. Warszawa: Difin.
- Michalak-Dawidziuk, J. (2018a). *Aspiracje zawodowe nauczycieli w procesie ich rozwoju zawodowego*. W: F. Szlosek, R. Gerlach (red.), *W świecie nauki, pracy i edukacji. 90-lecie urodzin Profesora Zygmunta Wiatrowskiego*. Warszawa: APS.
- Michalak-Dawidziuk, J. (2018b). *Awans zawodowy nauczycieli jako proces dynamicznych zmian – współczesna praktyka i perspektywa przyszłości*. W: J. Madalińska-Michalak & N. Pikuła (red.) *Edukacyjne konteksty współczesności – z myślą o przyszłości*. Kraków: Impuls.
- Michalak-Dawidziuk, J. (2018c). *Stres w pracy nauczyciela a jego dialogiczne relacje z uczniem*. W: U. Jeruszka, J. Łaszczuk, B. Marcinkowska & F. Szlosek (red.), *Nauka, edukacja, praca: profesorowi Stefanowi Michałowi Kwiatkowskiemu w 70-lecie urodzin*. Warszawa: APS.
- Ministerstwo Edukacji Narodowej, Departament Kształcenia Zawodowego i Ustawicznego, *Reforma kształcenia zawodowego w Polsce – 4 grudnia 2012 r. zakładane cele i oczekiwane rezultaty*, <https://www.google.com/search?q=Reforma+ksztata%C5%82cenia+zawodowego+w+Polsce+%E2%80%93+4+grudnia+2012+r.zak%C5%82adane+cele+i+oczekiwane+rezultaty&ie=utf-8&oe=utf-8> (20.12.2018).
- Nowosad, I. (2018). *Zmiana jako podstawowa kategoria rozwoju szkoły*. W: J. Madalińska-Michalak (red.), *Przywództwo nauczycieli*. Warszawa: FRSE.
- Nowosad, I. (2008). *Autonomia szkoły publicznej w Niemczech. Poszukiwania – konteksty – uwarunkowania*. Zielona Góra: UZ.
- Osiecka-Chojnacka, J., *Opinia merytoryczna do rządowego projektu ustawy o zmianie ustawy – Prawo oświatowe i ustawy o systemie oświaty oraz innych ustaw* (druk sejmowy nr 2861) z dnia 11.10.2018 roku Biuro Analiz Sejmowych Kancelarii Sejmu, <http://www.sejm.gov.pl/Sejm8.nsf/opinieBAS.xsp?nr=2861> (17.12.2018).
- Piekarski, J. (2013). *Jakość wiedzy, jakość szkoły – podstawa programowa a rynek pracy*. W: I. Kust & J. Michalak-Dawidziuk (red.), *Kształcenie i wychowanie dla pracy i rozwoju*. Warszawa: Wyższa Szkoła Menedżerska.
- Piekarski, J. (2011). *Jakość wiedzy pod kontrolą – uwagi na temat „kłątwy” ewaluacji biurokratycznej*. W: G. Michalski (red.), *Ewaluacja a jakość edukacji. Koncepcje – doświadczenia – kierunki praktycznych rozwiązań*. Łódź: UŁ.
- Potulicka, E. & Rutkowiak, J. (2010). *Noeoliberalne uwikłania edukacji*. Kraków: Impuls.
- Puchalski, T. (1969). *Statystyka. Wykład podstawowych zagadnień z ćwiczeniami*. Warszawa: PWN.
- World Bank Group. *Secondary Vocational Education International Experience*. Final Report. New Delhi 2015, [<http://documents.worldbank.org/curated/en/470241468000264353/pdf/103893-WP-P-145371-PUBLIC-Vocational-Education-Report-Final.pdf>] (20.12.2018).

Symela, K. (2018). *Od standardów kwalifikacji i kompetencji zawodowych do zbiorów informacji o zawodach*. W: U. Jeruszka, J. Łaszczyk, B. Marcinkowska & F. Szlosek (red.), *Nauka, Edukacja Praca Profesorowi Stefanowi Michałowi Kwiatkowskiemu w 70-lecie urodzin*. Warszawa: APS.

Education Law

- MEN, DKZiU, *Reforma kształcenia zawodowego w Polsce – 4 grudnia 2012 roku, zakładane cele i oczekiwane rezultaty*. Departament Kształcenia Zawodowego i Ustawicznego Ministerstwo Edukacji Narodowej, <https://www.google.com/search?q=Reforma+kszta%C5%82cenia+zawodowego+w+Polsce+%E2%80%93+4+grudnia+2012+rak%C5%82adane+cele+i+oczekiwane+rezultaty&ie=utf-8&oe=utf-8> (18.01.2019).
- Rozporządzenie Ministra Edukacji Narodowej z dnia 7 lutego 2012 roku w sprawie podstawy programowej kształcenia w zawodach (Dz. U. 2012, poz. 184).
- Rozporządzenie Ministra Edukacji Narodowej z dnia 7 lutego 2012 roku w sprawie ramowych planów nauczania w szkołach publicznych (Dz. U. 2012, poz. 204, zał. 8).
- Rozporządzenie Ministra Edukacji Narodowej z dnia 28 marca 2017 roku w sprawie ramowych planów nauczania dla publicznych szkół (Dz. U. 2017, poz. 703).
- Rozporządzenie Ministra Edukacji Narodowej z dnia 25 sierpnia 2017 roku w sprawie nadzoru pedagogicznego (Dz. U. 2017, poz. 1658).
- Rozporządzenie Ministra Edukacji Narodowej z dnia 15 lutego 2019 roku w sprawie celów i zadań kształcenia w zawodach szkolnictwa branżowego oraz klasyfikacji zawodów szkolnictwa branżowego (Dz. U. 2019, poz. 316).
- Ustawa z dnia 22 grudnia 2015 roku o Zintegrowanym Systemie Kwalifikacji (tj. Dz. U. 2018, poz. 2153 z późn. zm.).
- Ustawa z dnia 14 grudnia 2016 roku Prawo oświatowe (Dz. U. 2018, poz. 996 z późn. zm.).
- Ustawa z dnia 22 listopada 2018 roku o zmianie ustawy – Prawo oświatowe, ustawy o systemie oświaty oraz niektórych innych ustaw (Dz. U. 2018, poz. 2245 z późn. zm.).
- Zalecenia Parlamentu Europejskiego i Rady z dnia 23 kwietnia 2008 roku w sprawie ustanowienia europejskich ram kwalifikacji dla uczenia się przez całe życie (2008/C111/01).