SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2026
ORGANIZATION AND MANAGEMENT SERIES NO. 255

NON-FORMAL EDUCATION AS A TOOL FOR ADAPTATION IN A TRANFORMING LABOR MARKET. COMPETITION OR SUPPORT FOR FORMAL EDUCATION?

Sławomir ZIÓŁKOWSKI[1*], Michał BROŻYNA[2]

[1] AGH University of Krakow; slawomir@agh.edu.pl, ORCID: 0000-0002-2653-935X
[2] AGH University of Krakow; brozyna@agh.edu.pl, ORCID: 0000-0002-1285-5212
* Correspondence author

Purpose: The purpose of this publication is to analyze the role of non‑formal education and its potential application in the context of the challenges posed by the contemporary labor market. The authors also highlight possible tensions between specific forms of andragogical education delivered by private entities and formal education provided, for example, within university teaching. In doing so, they reference an illustrative case of a market-based qualification and examine, in this context, the opportunities afforded by both the Law on Higher Education and Science and the Act on the Integrated Qualifications System.
Design/methodology/approach: This article is analytical and review‑based in nature. It draws on a literature review and an analysis of legal regulations concerning non‑formal education, higher education, and the Integrated Qualifications System. It also employs a case study of the market‑based qualification "Academic Trainer" (code 14069).
Findings: Non‑formal education constitutes an important tool for adaptation in a transforming labor market, particularly under conditions of rapid technological change. The acquisition of partial qualifications may play a complementary role in relation to formal education, while in certain areas it may serve as its competitor. The case analysis also indicates the potential emergence of competency‑ and organization‑related tensions between universities and private providers.
Research limitations/implications: The conclusions may be used by universities and training institutions, for instance, in designing short learning formats and incorporating the qualifications acquired through such formats into the Integrated Qualifications System.
Originality/value: The value of the article lies in combining an andragogical and legal perspective to analyze the relationships between formal and non‑formal education. Its original contribution is a case study of a market‑based qualification at level 7 of the Polish Qualifications Framework (PQF), relating to competencies associated with core tasks performed by universities.
Keywords: non‑formal education, labor market, Integrated Qualifications System, market‑based qualifications, higher education.
Category of the paper: Research paper.

1. Introduction

The past decade has confronted the world with a series of unprecedented challenges: from the global COVID‑19 pandemic, through geopolitical tensions, to the technological revolution driven by artificial intelligence and automation. These disruptions have transformed the labor market into a dynamic environment in which the ability to adapt rapidly has become a key competency for workers. Traditional formal education, based on long-term university programs, is increasingly criticized for its rigidity, extended duration, and inability to keep pace with the speed of change. A university degree (even from a prestigious institution), although still highly valuable, no longer guarantees a strong position in the labor market and, for many employees, serves merely as a starting point for planning their development pathways within a lifelong learning strategy.

Non‑formal education[1] and the acquisition of partial qualifications–including, in particular, market‑based qualifications–constitute a response to the challenges of the labor market and the limitations inherent in obtaining full qualifications through formal education.

2. Andragogy – a response to the challenges of the contemporary labor market

The nature of the challenges faced by labor market actors is shaped by their multifactorial origins, including globalization processes, demographic change accompanied by more or less regulated migration flows, and the dynamic development of technologies – particularly artificial intelligence–and the growing demand for their application. In all these cases, new social needs as well as labor market needs emerge rapidly. The fluidity and dynamism of these needs imply that acquiring competencies in such areas extends beyond the capacity of traditional forms of formal education (higher education or vocational education), which provide what are legally defined as “full qualifications” under Article 2(10) of the Act on the Integrated Qualifications System of 22 December 2015 (Journal of Laws 2024, item 1606, consolidated text of 3 October 2024; hereinafter: IQS Act). Given the etiology of these challenges – particularly in the context of Europe’s demographic structure–one may assume that their mitigation can be achieved only through the utilization of existing human resources, meaning the acquisition of new competencies by individuals already active in the labor market.

[1] Formal education is delivered by universities and other institutions within the higher education system through programs that lead to the award of full qualifications, qualifications conferred upon completion of postgraduate studies, or vocational qualifications.
Non-formal education is provided through institutionally organized programs that do not lead to the award of full or partial qualifications falling within the scope of formal education.

For employees, this necessitates upskilling within educational processes that take into account the specific characteristics of adult learning, where the ultimate objective is the supplementation of knowledge and skills with strong emphasis on their direct practical application. At the same time, adult learners assimilate knowledge through the lens of their rich and multidimensional experience (Kolb, 2015). Achieving this requires the use of diverse methods and teaching approaches grounded in various assumptions, paradigms, and traditions (Knowles, 1980).

The most promising responses are non‑formal or informal educational formats that are organically aligned with the concept of lifelong learning. This thesis is reinforced by the andragogical profile of the stakeholders involved, as individuals acquiring competencies in these areas are typically adults (Brookfield, 1986). Consequently, such educational processes must be implemented within the paradigm of andragogical education (Knowles, Holton, Swanson, 2009).

In this context, an interesting space emerges – one that can be occupied by universities and other institutions within the higher education and science system, public and non-public schools, other entities within the general education system, as well as private organizations. This raises questions about the formal and legal frameworks within which training activities in the relevant labor market domains may be offered, and about the possibility of incorporating such training into the Integrated Qualifications System (hereinafter: IQS) (kwalifikacje.gov.pl, 03.02.2026).

Particularly compelling are the opportunities associated with acquiring market‑based qualifications, as defined in Article 2(11) of the IQS Act. This argument stems from the fact that such qualifications effectively compensate for deficits arising from the aforementioned socio‑economic challenges (Grabowska, 2025). By definition, market‑based qualifications respond to fluidly evolving societal and expert (professional, sectoral, substantive) needs across various branches of the labor market.

3. Qualifications and competencies

As noted by J. Orczyk (2009), in Polish literature on human resource management the terms qualifications and competencies are frequently used interchangeably, since (often abstracting from the specific legal and organizational definitions) the scopes of these concepts largely overlap. A similar stance is taken by M. Tyrańska (2021), who argues that competencies are relatively often confused with qualifications, and the two terms frequently appear in the literature as substitutes for one another.

Even when the terms are treated separately, they usually appear together in academic discussions–whether in the context of assessing supply and demand in labor market analyses, in the validation of training and development services (Juchnowicz, 2014), or in interpretations of assumptions within pedagogical theories (Góralska, Solarczyk-Szwec, 2012). Defining the relationship between qualifications and competencies in light of human capital theory, Orczyk assumes "that qualifications constitute general capital, including the inputs invested in its creation, whereas competencies shape the conditions for transforming qualifications into specific capital–a distinctive combination of personal attributes and tasks that creates opportunities for individual development during the performance of work. In other words, qualifications, including their structure, result from the inputs invested, while competencies are a reflection of their utilization, that is, their outcomes" (Orczyk 2009, p. 30).

According to Tyrańska (2021), competencies constitute a much broader concept than qualifications. Qualifications are more strictly defined by educational requirements and represent learned, formally structured patterns. Competencies, by contrast, play the most significant role in determining work effectiveness and are grounded in responsibility for task execution; they are characterized by uniqueness and an individual, non-replicable nature.

The situation is somewhat different from a formal–legal perspective, particularly in the context of qualification frameworks (the European and Polish Qualification Frameworks, as well as the Integrated Qualifications System – ZSK). Here, the definition of a qualification derives directly from the processes of validation and certification, which confirm the achievement of appropriate learning outcomes (in terms of knowledge, skills, and social competencies) that meet established standards. At the same time–with respect to qualifications not included in the ZSK–no such precise definition exists, and the concept of qualification may, for example, encompass competencies, provided that they meet the requirements specified in Annex 2[2] to the relevant Guidelines (Dąbrowska, 2025).

4. Market-based qualifications

This category of qualifications constitutes a type of partial qualification awarded outside the categories of full and partial qualifications referred to in Article 2(9) and (10) of the Act on the Integrated Qualifications System (UZSK).

[2] Annex 2. Basic Information on Obtaining Qualifications within Projects Co‑Financed by the ESF+, to the Guidelines for Monitoring the Material Progress of Programme Implementation for 2021–2027. Minister of Funds and Regional Policy, 2022. (https://www.funduszeeuropejskie.gov.pl/strony/o-funduszach/dokumenty/wytyczne-dotyczace-monitorowania-postepu-rzeczowego-realizacji-programow-na-lata-2021-2027/, 6 March 2026.

Under the applicable legislation, partial qualifications include:

- Qualifications distinguished within a given occupation, as referred to in Article 4(34) of the Act of 14 December 2016 – Education Law Act (Journal of Laws 2023, items 900, 1672, 1718, and 2005).
- Qualifications awarded upon completion of postgraduate studies, as defined in Article 160(1) of the Act of 20 July 2018 – Law on Higher Education and Science.
- Qualifications awarded upon completion of other forms of education, as referred to in: Article 162 of the Act of 20 July 2018 – Law on Higher Education and Science, Article 2(2)(3) of the Act of 30 April 2010 on the Polish Academy of Sciences (Journal of Laws 2020, item 1796), Article 2(3)(2) of the Act of 30 April 2010 on Research Institutes (Journal of Laws 2022, item 498; 2023, item 1672), as well as courses and training programmes indicated in Article 4(6) of the Act of 21 February 2019 on the Łukasiewicz Research Network (Journal of Laws 2020, item 2098; 2023, item 1672).
- Regulated qualifications – qualifications established by separate provisions, awarded in accordance with procedures laid out in those provisions, excluding qualifications awarded within the school education system and higher education and science system.
- Sectoral qualifications – occupational qualifications not regulated by separate legislation, designed to meet the needs of a particular branch or sector and reflecting its specific characteristics, awarded by entities conducting statutory activities in the relevant sector, which have been granted authorisation to certify a given sectoral qualification under Article 41(1). The document confirming the award of such a qualification is a sectoral qualification certificate.
- Craft qualifications – qualifications awarded by chambers of crafts after examinations in occupations specified in Article 3(3a) of the Act of 22 March 1989 on Crafts (Journal of Laws 2020, item 2159); the documents confirming qualification are master's diplomas and journeyman's certificates.
- Market-based qualifications - according to Article 2(10) of the UZSK, market-based qualifications are those not regulated by separate provisions, created to respond to social needs or labor‑market demand, awarded by business entities that have been granted authorisation to certify a given market-based qualification under Article 41(1). The confirming document is a market-based qualification certificate.

The qualifications listed above are incorporated into the Integrated Qualifications System (ZSK), established by the Act of 22 December 2015 on the Integrated Qualifications System. The ZSK is designed as an instrument supporting the implementation of lifelong learning policies and the development of high‑quality human capital. To facilitate the practical implementation of its objectives, an open and publicly accessible digital database aggregating all qualifications was created–the Integrated Qualifications Register (ZRK). Submitted

qualifications must comply with the general principles of the ZSK regarding their awarding, description and comparability.

The ZRK provides not only an overview of all qualifications included in the ZSK and awarded in Poland, but also enables:

- submission of applications for inclusion of qualifications in the ZSK,
- granting authorisations to certify qualifications,
- submission of applications for entry into the list of external quality assurance entities (PZZJ). (Będkowski, Pawłowska, Pluskota, Sokulska, 2020).

The last component is particularly relevant for analysing the institutions that submit qualifications and are authorised to award them.

Currently, the ZRK comprises 20,561 qualifications awarded by 2507 institutions. Among these are 261 market-based qualifications and 19 sectoral qualifications (kwalifikacje.gov.pl).

Within the Polish Qualifications Framework (PRK), full qualifications at levels 6 and 7 are "reserved" for higher‑education programmes and confirmed by:

- a bachelor's degree (PRK level 6),
- a master's degree (PRK level 7), awarded either through second‑cycle studies or long‑cycle master's programmes.

Level 8 qualifications are confirmed by a doctoral diploma and may also be obtained through doctoral schools.

Partial qualifications at PRK levels 6 and 7 (the ZRK contains no partial qualifications at level 8) do not require completion of full degree programmes, although they may also be offered by universities, for example in the form of postgraduate studies that award a qualification entered in the ZRK (currently 38 such postgraduate programmes are registered).

Other partial qualifications at PRK levels 6 and 7 fall into three additional categories:

- 50 regulated qualifications (all concerning the verification and assessment of exam solutions),
- 5 sectoral qualifications (all related to training, coaching, and leadership in sports disciplines),
- 74 market-based qualifications, of which 48 are active, covering a wide spectrum of areas, including therapy, staff development, business processes, sports training, and entertainment activities.

5. Solutions provided in the higher education act and the Integrated Qualifications System Act

The formal and legal possibilities for offering training within the scope of market-based qualifications are provided for in the Law on Higher Education and Science (hereinafter: PrSzWiN) and the Act on the Integrated Qualifications System (UZSK). In the context of these regulations, it is necessary to distinguish between "universities, scientific institutions of the Polish Academy of Sciences, and research institutes" and "entities conducting organised activities in the field of the economy, labor market, education or training."

For the first group, the typical formats include:

- postgraduate studies (Art. 160 PrSzWiN),
- other forms of education (Art. 163 PrSzWiN)[3],
- the possibility provided for in Article 13 UZSK.

For the second group, the key mechanism concerns the possibility of offering education leading to market-based qualifications, as provided for in Art. 14 UZSK. However, universities may also make use of this mechanism (see below).

The rules for organising, conducting, documenting and charging fees for postgraduate studies are regulated in Articles 160 and 162-163 of PrSzWiN. The inclusion in the ZSK of qualifications awarded as part of these forms of education is possible if a level of the Polish Qualifications Framework has been assigned to them (Art. 13 UZSK).

In the case of including in the Integrated Qualifications System qualifications awarded by universities within the framework of other forms of education under Article 162 PrSzWiN, Articles 14-25 UZSK apply accordingly. It should be noted, however, that in the case of partial qualifications (e.g. market-based qualifications), Articles 26-29 and Articles 36 and 41-81 UZSK shall apply.

By contrast, the inclusion of market-based qualifications in the ZSK by entities other than universities, PAN scientific institutes or research institutes is carried out in accordance with Article 14 UZSK. For this purpose, an application must be submitted to the competent minister (Art. 4b UDAR[4]) requesting the inclusion of a market-based qualification in the Integrated Qualifications System.

[3] Due to the wording of Article 11(2) of the Law on Higher Education and Science, this concept does not include so‑called specialist education, which enables learners to obtain a full qualification at PRK level 5 and may be offered exclusively by vocational universities. By contrast, free‑market qualifications are, by definition, partial qualifications.

[4] The term competent minister refers to the minister designated pursuant to the provisions of the Act of 4 September 1997 on Government Administration Departments (Journal of Laws 2024, item 1370) – hereinafter: UDAR. According to Article 4b of this Act, the minister competent for matters concerning the inclusion of qualifications belonging to a given government administration department in the Integrated Qualifications System is the minister responsible for that department. This is therefore the minister competent for the matters corresponding to the name of the relevant administration department, as defined in Article 5 of the Act (Art. 4 UDAR).

It should be emphasised that any entity conducting organised activities in the field of the economy, labor market, education or training may submit an application for the inclusion of a qualification in the ZSK. Thus, such an entity may also be a university, insofar as it conducts organised activities in the field of education. The formal requirements for the application as well as the procedure for submitting and reviewing it are defined in Articles 14-25 UZSK.
Upon completion of the procedure, the given qualification is incorporated into the ZSK by means of an announcement issued by the competent minister in the Official Gazette of the Republic of Poland "Monitor Polski" (Art. 25 UZSK). Immediately thereafter, the minister publishes on the Integrated Qualifications System portal information regarding the possibility of submitting applications for authorisation to certify the given market-based or sectoral qualification (Art. 26 UZSK).

6. Market‑based qualification: Conducting courses in a given academic discipline using active methods in the teaching process – Academic Trainer (Trener Nauki)

The presented case of a partial qualification (PRK level 7) is particularly interesting from a legal perspective; at the same time, it provides a useful basis for illustrating two pathways for introducing qualifications into the Integrated Qualifications System (ZSK), authorising training providers in a given area, and conducting the training.

The academic trainer qualification is registered under code 14069. Within the Integrated Qualifications System, it constitutes a market‑based qualification (Art. 2(11) UZSK).

As follows from the description of this qualification included in the relevant ministerial announcement, it relates "Conducting courses in a given academic discipline using active methods in the teaching process – academic trainer". Thus, it encompasses one of the core tasks of universities, namely training and developing their academic staff (Art. 11(1)(5) PrSzWiN).

At the same time, according to the ministerial announcement, the sole authorised certifying entity for this qualification is Trener Nauki Dr Justyna Małkuch‑Świtalska, i.e., the applicant who initiated the inclusion of the qualification "academic trainer" in the ZSK[5].

This naturally raises the question of whether, and to what extent, this fact affects or restricts universities in fulfilling their core statutory duty of staff development.

It is clear that a university may enable its staff to obtain the market‑based qualification "Conducting courses in a given academic discipline using active methods in the teaching process – academic trainer" (code 14069) by arranging certification through the entity authorised to certify this qualification.

[5] It should be noted that, both legally and ethically, such actions raise no doubts whatsoever.

However, this requirement does not apply when a university decides to award its staff as "academic trainer" within other forms of education, for the purpose of staff training. In such cases, the rules set out in Articles 162-163 PrSzWiN apply. These provisions authorise universities to conduct other forms of education, one example of which is staff development and training. Under Article 162 PrSzWiN, a person completing such a form of education has a public‑law entitlement to receive a document confirming completion of the programme (Jakubowski, 2023). The type and format of the document are determined by the university. By their very nature, such documents must indicate the competencies acquired or, at minimum, define the programme completed. It appears that such a document may use the designation "academic trainer" or a similar term, provided it does not reproduce the precise description of the market‑based qualification identified by code 14069.

This interpretation is justified by the fact that otherwise it would lead to a de facto privatisation of an area constituting a fundamental statutory function of universities. On the one hand, this is evident because in the domains defined in Article 11 PrSzWiN, universities effectively exercise public authority, or more precisely, perform state functions in the field of education (Art. 70(1) of the Constitution) (Borysiak, Królikowski, 2016). Although private entities may also operate in these areas, they cannot limit the state's ability–nor that of its institutions–to carry out these functions.

On the other hand, it must be noted that the ability to conduct other forms of education does not derive from the constitutionally guaranteed autonomy of universities, which is essential not only for the realisation of the constitutional right to education (Art. 70 of the Constitution), but also for academic freedom (Art. 73 of the Constitution) (Jakubowski, 2023).

Since university autonomy is not the normative foundation for conducting such educational formats, the fulfilment of the university's basic statutory task–training its own staff–within these formats must necessarily rely on instruments of civil law (Jakubowski, 2023). Consequently, the use of other forms of education will inevitably exist in a certain tension with training delivered within commercial projects. In fact, to some extent, the certificates issued by universities may become potential competitors to commercial certificates.

This gives rise to the question of what form a "certificate" or "attestation" issued by a university should take when confirming that an individual possesses competencies in the field of "academic trainer," obtained as part of internal staff development (Art. 11(1)(5) PrSzWiN). From the perspective of third parties–i.e., participants in training conducted by such an academic trainer–there is a risk of confusion regarding whether the trainer holds the market‑based qualification registered under code 14069. Naturally, Article 11(1)(5) PrSzWiN applies exclusively to the training of a university's own staff. Therefore, individuals trained under this provision cannot present themselves as holders of the "academic trainer" qualification for the purpose of providing services to external entities (including other universities).

In this context, special attention must be paid to the content of certificates issued by universities under Article 162 PrSzWiN, to avoid creating the false impression that they relate to the market‑based qualification registered under code 14069.
Due diligence is also necessary because the entity authorised to certify qualification 14069–in its commercial activities–uses a registered trademark containing the phrase "Trener Nauki" (trademark application no. Z.478915)[6]. This may give rise to potential issues of trademark infringement[7].

7. Conclusion

In response to socio‑economic and technological challenges, non‑formal education is becoming a cornerstone of resilience in an uncertain world. It is emerging as a practical alternative to formal education, as it does not require such substantial time investments and demonstrates significantly greater flexibility in the face of unpredictable labor‑market trends. This form of education not only complements but increasingly replaces traditional models, offering modularity, accessibility, and direct applicability to professional practice. It therefore appears that the popularity of training and development services – particularly those that qualify and certify acquired knowledge and competencies (especially those granted official recognition)–will continue to grow in the near future.

Higher education institutions and universities are also recognising this trend. In recent years, they have more confidently expanded their offerings to include so‑called Other Forms of Education (IFK), which lead to micro‑credentials and confirm the achievement of learning outcomes (and ECTS credits) equivalent to those offered within regular study cycles (individual modules and courses). They also increasingly offer commercial specialist courses–traditionally the domain of private training providers–drawing on the expertise of practitioners and professional trainers.

As a result, the potential competition between higher education institutions and providers of training and development services (training and short learning formats versus formal education, including postgraduate studies) has transformed into a form of coopetition, creating an integrated system capable of responding to the needs of the contemporary world.

[6] However, it should be noted that the trademark in question is a word-and-graphic mark. https://ewyszukiwarka.pue.uprp.gov.pl/search/pwp-details/Z.478915, 08 February 2026, 18:50.
[7] Of course, provided that all relevant conditions are met.

References

1. Będkowski, M., Pawłowska, K., Pluskota, A., Sokulska, I. (2020). *Zintegrowany Rejestr Kwalifikacji jako narzędzie wspierające rozwój edukacyjno-zawodowy*. IBE.
2. Bordzoł, P., Grabowska, A., Musialik, M., Welle, M., Kopeć-Panek, N. (2025). In: A. Grabowska (Ed.), *Opisywanie kwalifikacji wolnorynkowych, sektorowych i nadawanych po ukończeniu studiów podyplomowych. Poradnik.* Instytut Badań Edukacyjnych. Państwowy Instytut Badawczy. Retrieved from: https://ibe.edu.pl/files/BIBLIOTEKA/ZSK/Opisywanie-kwalifikacji-wolnorynkowych-sektorowych-i-nadawanych-po-ukonczeniu-studiow-podyplomowych.pdf, 07.02.2026.
3. Borysiak, W., Królikowski, M. (2016). In: M. Safjan, L. Bosek (Ed.), *Konstytucja RP. Tom I. Komentarz do art. 1-86, art. 70, nb. 20, wyd. 1.* Warszawa: C.H. Beck.
4. Brookfield, S.D. (1986). *Understanding and Facilitating Adult Learning: A Comprehensive Analysis of Principles and Effective Practices.* Milton Keynes: Open University Press.
5. Dąbrowska, E. (2025). Pozaformalne ścieżki dostosowywania kwalifikacji do potrzeb rynku pracy w Polsce w kontekście uwarunkowań Unii Europejskiej i regionu identyfikującego wysoki popyt na wykwalifikowanych robotników. *Zeszyty Naukowe Akademii Górnośląskiej, 27(3),* 23-34. https://doi.org/10.53259/2025.03.03
6. Góralska, R., Solarczyk-Szwec, H. (2012). O kompetencjach w kontekście Polskiej Ramy Kwalifikacji dla uczenia się przez całe życie. *Edukacja Dorosłych, 2*, 27-41.
7. Jakubowski, A. (2023). *Art. 162*. In: A. Jakubowski (Ed.), *Prawo o szkolnictwie wyższym i nauce. Komentarz* (wyd. 1, nb 2). C.H. Beck.
8. Juchnowicz, M. (2014). Sektorowe badania podaży i popytu na kwalifikacje i kompetencje. *Edukacja Ekonomistów i Menedżerów*, *32*(2), 11-20. https://doi.org/10.5604/01.3001.0009.4665
9. Knowles, M. (1980). *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (2nd ed.). Englewood Cliffs: Prentice Hall.
10. Knowles, M., Holton, E.F. III, Swanson, R. (2009). *Edukacja dorosłych.* PWN.
11. Kolb, D.A. (2015). *Experiential Learning: Experience as the Source of Learning and Development (2nd ed.).* Pearson Education.
12. *Kwalifikacje wolnorynkowe.* Retrieved from: https://kwalifikacje.gov.pl/indywidualny/wiedza/kwalifikacje-wolnorynkowe/, 03.02.2026.
13. Orczyk, J. (2009). Wokół pojęć kwalifikacji i kompetencji. *Zarządzanie Zasobami Ludzkimi*, *3-4*, 19-32.
14. Tyrańska, M. (2021). *Wybrane zagadnienia zarządzania kompetencjami pracowników w organizacji.* C.H. Beck.

15. Ustawa z dnia 20 lipca 2018 r. – Prawo o szkolnictwie wyższym i nauce. Dz.U. z 2024 r. poz. 1571.
16. Ustawa z dnia 22 grudnia 2015 r. o Zintegrowanym Systemie Kwalifikacji. Dz.U. z 2020 r. poz. 226.