

VOCATIONAL EDUCATION AND BUSINESS - LOOKING FOR A COOPERATION MODEL

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STRUKOVNO OBRAZOVANJE I POSLOVNI SVIJET – POTRAGA ZA MODELOM SURADNJE

Sažetak

Kombiniranje obrazovanja s poslovnim svijetom obično se povezuje s naprednim tehnologijama, inovacijom i akademskim okruženjem. Iako se ulažu značajni naponi, rezultati te suradnje nisu zadovoljavajući, posebice u srednjojistočnoj Europi, uključujući Poljsku. Često se zaboravlja važnost suradnje strukovnih obrazovnih institucijai tvrtki. Ta je suradnja u Poljskoj bila vrlo uspješna sve do promjena u političkom sustavu. Situacija se promijenila nakon 1989., kada je započela marginalizacija strukovnog obrazovanja. U današnje vrijeme svjedoci smo procesa rekonstruiranja i ponovnog razvoja poljskog strukovnog obrazovanja koje, naravno, mora surađivati s poslovnim svijetom. Ovaj rad prikazuje koje je korake poduzela poljska vlada u cilju poboljšanja poljskog strukovnog obrazovanja. Većinu ovih mjera sufinancira Europska unija. Osim toga, članak prikazuje prednosti i izazove modela kojeg je osmislila Syntea, jedna od najuspješnijih poljskih vježbeničkih tvrtki. Model integrira strukovno obrazovanje i tvrtke te na taj način podržava obrazovni proces.

Ključne riječi: strukovno obrazovanje, reforma strukovnog obrazovanja, razvoj kurikuluma

Summary

Combining education with business is usually associated with advanced technologies, innovation and academic world. However, even though the efforts are considerable, the results of such collaborations are dissatisfying, especially in CEE countries, including Poland. The importance of the level of cooperation of vocational education institutions with commercial companies is frequently forgotten in terms of business-education collaboration, which, in the case of Poland, had been perfect until the transformation of the political system. The situation changed after the transformation in 1989, when vocational education in Poland started to be marginalised. Nowadays, we witness the process of reconstructing and redeveloping Polish vocational education that must naturally cooperate with business. The article presents initiatives undertaken by the Polish government aiming at restoring Polish vocational education. Most of these measures are co-financed by the European Union. Moreover, the article demonstrates the advantages and challenges of the system model created by one of the greatest Polish training companies, Syntea. The model consists in integrating vocational education with companies by supporting teaching process, validating skills by independent VCC certification as well as defining competence needs specified by businessmen.

Key words: Vocational education, vocational education reform, curriculum development

1. Introduction

Combining education with business is usually associated with advanced technologies, innovation and academic world. Such cooperation frequently involves considerable funds, subsidies from the state budget and great expectations. However, even though the efforts are considerable, the results of such collaborations are dissatisfying, especially in CEE countries, including Poland. Lublin, an academic city in Eastern Poland, exemplifies this situation very well. Although the total number of students in the past 10 years decreased from 100,000 to 80,000, each of the five public universities managed to apply for EU subsidies successfully and use EU funds in order to erect teaching facilities, which have become 'memorials' of EU financial perspective for the years 2007-2013. However, the question arises: who is going to use these premises and, is the modern infrastructure, deprived of modern laboratories, going to increase teaching level and transfer science to business? An interesting example of using EU funds in Lublin is the fact that the new lessee renting space in Lublin Science and Technology Park (subsidised from the EU funds in amount of PLN 15 million) that is supposed to incubate business and create conditions for transferring technology to business is.... Lublin Concert Hall.

The importance of the level of cooperation of vocational education institutions with companies is frequently forgotten in terms of business-education collaboration, which, in the case of Poland, had been perfect until the transformation of the political system. Due to the system of apprenticeships and practical placements, learners attending vocational schools could acquire real skills and competences instead of pure theoretical knowledge. The situation changed after the transformation in 1989, when vocational education in Poland became marginalised and this is confirmed by numbers. The number of vocational schools has decreased fourfold in the last 20 years, from 814.5 thousand in 1990 to 210.9 thousand in 2011-2012. The number of basic vocational schools slumped from 3000 in 1990 to 1800 in 2012, i.e. 42% (Worek, Guzik, 2013, pp. 5-10). This decrease is sharpened not only by the market lacking in specialists, but also by entrepreneurs complaining about the quality of education in vocational schools. This situation is also depicted by the fact that numerous qualified specialists emigrate from Poland to Western Europe. This situation has become more popular after Poland's accession to the EU and can be exemplified by the Polish plumber in France. Consequently, professionals who stayed in Poland value their monthly remuneration three times higher than the national average salary.

2. Reconstructing vocational education in Poland - using EU funds

In Poland we can currently observe the process of reconstructing vocational education that must cooperate with business. A tremendous amount of funds required for preparing and introducing the reform comes from EU funds, especially from the European Social Fund, of which Poland is the beneficiary.

In the 2007-2013 financial perspective, two priorities including actions for vocational education have been prepared within the Human Capital Operational Programme financed by the European Social Fund. Priority 3 "High quality of education" and Priority 9 "Developing education and improving competencies in regions." The main difference between these priorities is the fact that Priority 3 was allocated centrally by the Ministry of Education and Priority 9 was managed by regional entities (16 regions).

Priority 3 includes two most important sub-actions: Sub-action 3.3.3, Modernizing teaching content and methods, developing and pilot-implementing innovative curricula, teaching materials and teaching methods. Sub-action 3.4.3, Promotion of lifelong learning, developing diagnostic tools and teaching materials useful in recognizing learner's professional predispositions and interests.

A system project "Improving core curricula - a key to modernizing vocational education" implemented by the NATIONAL CENTRE FOR SUPPORTING VOCATIONAL AND CONTINUING EDUCATION in the years 2008 - 2013, the value of which amounts to PLN 22.5 million is an axis of vocational education reform within Sub-action 3.3.3. The project aimed at:

- Developing methods for assessing consistency in core curricula,
- Developing methods for examining core curricula in terms of acquired qualifications,
- Examining qualifications and competences that employers require from vocational school graduates,
- Developing methods for designing core curricula for teaching professions,
- Designing core curricula for 193 professions,
- Developing sample curricula with subject and module structures.

Moreover, Sub-action 3.4.3 should be indicated within Priority 3, as a result of which numerous projects involving organizing practical placements for teachers and coaches were implemented. Furthermore, in the years 2009, 2010 and 2011 over 10,000 practical placements for teachers were financed (value: PLN 150 million).

The main aim of implementing these projects was to broaden teachers' and professional coaches' knowledge about new technologies applied in companies. Since the close cooperation with companies is required, the participating teachers could see how a modern company functions. Due to this, the knowledge they share with learners could become more up-to-date and practical.

However, Priority 9 includes Sub-action 9.2: Enhancing attractiveness and quality of vocational education. This sub-action includes implementation of two types of projects: situation-analysis projects and development programme projects which respond to the analyses.

Sub-action 9.2 of Priority 9 is immensely important since it is entirely aimed at vocational teaching. According to the data from 31 May 2013, Intermediary Bodies signed co-financing agreements for 1600 projects amounting to about PLN 1560, which make around 85% of allocation (Progress in implementing OPHRD, 2013).

Moreover, numerous other actions and sub-actions financed from the OPHRD assets should be taken into consideration. They could be also used for developing and modernizing facilities used in vocational education.

To summarize, it must be emphasised that the current EU financial perspective involves applying over PLN 2.2 billion of EU funds aiming at introducing the vocational education reform. Over 7 thousand vocational schools have been supported.

3. The first effects of using EU funds in Poland during the years 2007-2013: situation analysis

The Polish government has undertaken several actions aiming at changing the situation of vocational education. Their scope has been presented above. It may be stated that actions taken between 2007 and 2013 only introduced the real implementation of mechanisms allowing to adjust vocational education to the needs of the labour market since they do not introduce any specific solutions but only provide analysis of the current situation, of course except for some particular pilot projects with limited scope.

3.1 The lack of cooperation mechanisms between an employer and a school.

It is of utmost importance to create specific standards creating and developing relationships between employers and the education system, e.g. by including employers' representatives into the process of enhancing the quality of vocational education.

This requirement is clear and understandable since the direct 'recipients' of employees educated in vocational schools are employers. Moreover, in free market economy, newly-employed staff must generate income for their employers. Otherwise, employers will be unable to provide their staff with employment. Thus, it is in employers' interest to cooperate in developing curricula adjusted to labour market needs, curricula of practical profession teaching, or examination requirements.

The panel research conducted by the Ministry of Education in 2011 for 'Vocational school - school of positive choice' project pointed to a conclusion that there is no general system of cooperation between vocational schools and entrepreneurs. Moreover, it was stated that the existing forms of collaboration result from individual relations, i.e. between a school headmaster and an employer, as well as their individual arrangements. Although entrepreneurs frequently complain about the low quality of vocational education, they are not really aware of their roles in enhancing the quality of vocational education, e.g. by developing internal training and education paths for new staff, including trainees.

Keeping practical aspects of vocational education under improved organisational supervision, particularly by defining the roles of current apprenticeship mentors, could solve the problem in question. Especially because this function is currently being performed ineffectively. An apprenticeship mentor should focus on developing relationships with employers so that theoretical topics covered within school curricula would be adjusted to employers' (labour market) needs and requirements. Simultaneously, mentors should support the teaching process taking place in the employer's company (Analysing vocational ..., 2011, p. 25).

Furthermore, an important component of the mechanism in question should involve creating regulations on financial incentives for employers, e.g. facilitating the process of reimbursing expenditure on salaries paid to employees who learn their jobs as well as on social insurance contributions paid for refunded remuneration for employers (Analysing vocational ..., 2011, p. 35).

3.2 No uniform competence measurement standard

It is acknowledged that mismatching employees' competences to employers' needs results in measurable ineffectiveness that leads to worse economic results achieved by companies. However, this situation is not confirmed by any widely available research results that could provide economists with knowledge sufficient to form recommendations. It is also acknowledged that this condition results from the lack of data on efficiency of production factors and companies' financial ratios achieved within analysing the influence that competence mismatches have on companies' functioning (Skill mismatch, 2012, p. 18).

This situation is confirmed by the results of research conducted by Łukasz Sienkiewicz. It may be suggested that, according to the research results, each third company from the group of 941 medium and large enterprises in general do not apply any tools used for measuring human capital (Sienkiewicz, 2012, pp. 37-45).

Due to this, from Polish employers' point of view, it is currently irrelevant to quantify results of benchmarking the required education level and the increase of company's productivity. However, it is difficult to talk about mismatching if there are no available competence measurement, it is of utmost importance to implement a reliable, common competence validation system both in vocational education and companies.

3.3 No information exchange

The next diagnostic element has been formulated on the basis of research conducted within one action included in "Improving core curricula - a key to modernizing vocational education" project analysing qualifications and competences that employers expect from vocational school graduates (conducted in 2009). The task was carried out by analysing 32 Polish and non-Polish research projects involving the subject in question. Final conclusions concern especially the information barrier present on the labour market: a person looking for a job does not have thorough knowledge about the job, and a company looking for an employee does not have complete information on candidates. Analysing conclusions and recommendations included in the research indicates that forecasting competences that may be required in future is essential due to great amount of time needed for preparing graduates to enter the labour market (Sienkiewicz, Gruga, 2009).

However, we must remember that prognoses of changes occurring on the labour market are not fully reliable and the demand for work in various sectors frequently fluctuates.

3.4 The lack of additional, non-vocational competences that vocational school graduates could acquire

Key competences, also known as metacompetences, are of utmost importance due to dynamic changes taking place on the labour market and increasing flexibility in activities undertaken by specific companies (Sienkiewicz, Gruza, 2009, p. 105). Such competences do not depend on any company or business and may be used in carrying out various professional activities. They especially include :

- Recognizing casual and functional relationships and complexity of phenomena,
- learning problem-solving measures,
- looking for, segregating, and applying information from various sources,
- self-development, flexible reaction to changes, looking for new solutions,
- developing interpersonal communication, applying technologies, speaking several foreign languages,
- advancing arguments and standing one's ground
- cooperation and successful team communication,
- organising work, familiarizing with working techniques and tools, planning activities, bearing responsibility for results.

Moreover, metacompetences are complemented by business-related competences, closely connected with one business but not related with any specific profession or company operating within the particular business. For instance:

- knowing the structure of a given business,
- being able to analyse actions and strategy plans devised by competitors
- becoming familiar with the most recognizable companies on the market and with the relationships between them,
- being skilled in implementing common projects with other companies.

These conclusions have been used for developing the new core curriculum for vocational education. Records involving both competence groups are present in both the set of personal and social competences as well as learning outcomes involving starting and running business activities. Yet, there is still a question remaining: will vocational school teachers be able to quickly catch up with changes made to core curricula and learn methods of teaching new competences, extremely different from the previously taught ones?

3.5 Deficiencies in teacher competences.

One must not forget about a crucial link in vocational education, i.e. teachers. It is trivial to claim that for the vocational education to be successful, learners should be taught by teachers who are internally satisfied (which results from self esteem), energetic (which is strictly connected with proportionate salary and, as we know, teachers do not earn a lot), and familiar with advanced working methods applied in modern companies (Borys, *Olsztyn 2012*).

Due to this, it is important for teachers to receive continuing education in vocational subjects, especially in terms of changes occurring in the real economy as well as system approach towards implementation of obligatory in-company practical placements and internships for teachers.

3.6 Employers are not ready to cooperate

Employers lack staff who could care for interns and trainees. Due to this, the cooperation of schools with employers is rather poor. On the one hand this concerns properly trained individuals who can share their knowledge (implementing improved teaching elements into practical vocational education). On the other hand, it concerns appointing a person who could care for trainees and interns.

Moreover, employers who were asked to indicate necessary changes that could make them more eager to cooperate, emphasised not only the need to reduce bureaucracy and formalities but also to solve problems concerning financial issues, i.e. remuneration for mentors, reimbursement of teaching costs (Final report ..., 2010, p. 50).

4. Example of Syntea model

Presumably, system implementation of solutions involving reform of vocational education, especially the cooperation of schools and employers, is to be included in the new EU financial perspective for the years 2014-2020 and its core will consist of recommendations and diagnostic results, especially those presented above.

However, apart from official reforms financed by the government, there are also commercial, grass-root processes implemented by various institutions, e.g. Syntea S.A. that created a system of integrating vocational education with companies (VCC - Vocational Competence Certificate). The system includes the following elements:

- the company's own teaching products compliant with VCC standard. They complement formal education system compliant with the core curriculum and adapted to the current labour market needs;
- a validation system based on external examination platform and carefully followed procedures involving verification of teaching outcomes;
- apprenticeship and practical placement programmes;
- employment support programmes.

The apprenticeship and practical placement programmes developed by Syntea are new in terms of diagnosis and, simultaneously, the above recommendations. VCC apprenticeships are developed within Curriculum Development, according to which even the most thoroughly prepared curriculum cannot substitute the real experience gained not by observing the mentor during traditional practical placements but by participating in a strictly commercial project that must be economically positive for businessmen, right from launching it.

However, the problem of finding employers who would like to participate in apprenticeship programmes has been solved within Syntea partnership system involving not only a network of vocational schools cooperating directly or indirectly (through its VCC partners, i.e. other training companies offering Syntea's products) with Syntea, but also a network of employers especially from Germany. Initially Syntea aimed at providing traditional employment agency services including one skills-developing element, e.g. foreign language courses for individuals planning to go abroad). However, it turned out that apprenticeship programmes have become extremely popular with pupils learning in vocational schools abroad. Such programmes are attractive for businessmen since German labour market lacks in employees with vocational background and the number of Polish workers migrating to new EU member countries is insufficient for the constantly developing German economy. Furthermore, the apprenticeship programmes in question have become a great and unique opportunity for learners to gain extraordinary professional experience.

Participating in a few-weeklong apprenticeship programme does not make its participants feel anxious for disadvantages of economic migration.

Moreover, Syntea offers interesting opportunities of participating in remote apprenticeship programmes for specific professionals, i.e. graphic designers, software developers with Internet access and remote communication tools for participating in teleconferences.

5. Conclusion

Adapting the scope and quality of competences acquired by vocational school graduates to the needs of labour market in terms of developing efficient cooperation mechanisms between education and business sectors is of utmost importance in such countries as Poland or Croatia, which are, in comparison to Western Europe, economically underdeveloped.

Due to the fast pace of modernisation processes we can currently observe great technological and civilisational development in EU member countries. On the one hand this is triggered by global economic acceleration and on the other hand by a unique possibility of receiving assets from available EU funds. Hence, we cannot afford to “produce” the unemployed and poorly qualified staff.

It is crucial for public institutions to follow applications and formula recommendations and apply them appropriately. Furthermore, methods and initiatives integrating employers with the education sector are of utmost importance. They are developed by such companies as Syntea, yet it seems that meeting the following requirements may be crucial to optimally use practical placement/apprenticeship opportunities within Curriculum Development:

- Apprenticeships should have precisely defined aims. This is needed only if trainees see the sense of the activities they do and can observe specific results.
- Both mentors and the trainees should be prepared for the types of activities undertaken within the practical placement/apprenticeship programmes. Moreover, mentors should not only specify their expectations, but also provide details of their assessment criteria.
- The job done during apprenticeship should be thoroughly assessed and the final grade should be discussed with the trainee. Both the apprentice and the mentor should produce recommendations on how to do such job more effectively in the future.
- After completing a task, a trainee should be provided with information on how meaningful the job was for the entire company.

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