

# Implementing ECVET Principles. Reforming Poland's Vocational Education and Training Through Learning Outcomes Based Curricula and Assessment

Horacy Dębowski\*

Wojciech Stęchły\*\*

## Abstract

*The aim of this article is twofold. First, to propose what it means to implement the European Credit System for Vocational Education and Training (ECVET) into a national qualifications system. Second, to describe in detail the key elements and broader context of the 2012/2013 vocational education reform in Poland, which introduced the learning outcomes approach and ECVET system. We show that key ECVET principles were implemented in Poland because they were treated more as a means to modernise the national VET system, rather than to promote the international mobility of learners.*

**Keywords:** learning outcomes, credit accumulation and transfer, validation, assessment, qualifications, ECVET

---

\* Educational Research Institute, Warsaw School of Economics, h.debowski@ibe.edu.pl

\*\* Educational Research Institute, w.stechly@ibe.edu.pl

## Introduction

European Credit System for Vocational Education and Training (ECVET) is the system of credit accumulation and transfer in VET introduced by the 2009 Recommendation of the European Parliament and of the Council. The ECVET Recommendation calls on EU Member States to ‘create the necessary conditions and adopt measures, as appropriate, so that as from 2012 – in accordance with national legislation and practice, and on the basis of trials and testing – it is possible for ECVET to be gradually applied to VET qualifications at all levels of the EQF’ (Council of the EU, European Parliament 2009).

According to the 2014 external evaluation report on ECVET implementation (PPMI 2014) and the European Centre for the Development of Vocational Training, which annually monitors ECVET implementation, the ECVET process has been started in most of the EU Member countries, but only a few have explicitly declared that they have begun to apply it (Cedefop 2013; 2014). It should be added, however, that these monitoring activities rely to a large extent on the opinions of national experts and decision makers. And since ‘applying ECVET to VET qualifications’ might be understood differently among experts, representatives of different EU countries and various stakeholders (cf. PPMI 2014, Cedefop 2013, Fietz et al. 2008), these reports might not adequately present the current state of the art of ECVET implementation in every EU country. Poland serves as an example. Because the ECVET name is not *expressis verbis* mentioned in Poland’s formal documents, and because Poland’s policy makers and experts are not sure how to interpret the phrase ‘applying ECVET to VET qualifications’<sup>1</sup>, they are rather hesitant to admit that Poland has implemented it in formal education. For these reasons, it is not commonly recognized at the EU level that Poland’s VET reform of 2012/2013 implemented the ECVET principles<sup>2</sup>, at least at the regulatory level.

---

<sup>1</sup> This statement is based on the outcomes of interviews with Polish decision makers and stakeholders, we conducted for the purpose of this article.

<sup>2</sup> In the ECVET evaluation report we read: ‘... there are no significant hopes that credit systems being developed at the national level in countries such as Italy, Poland, Estonia or Lithuania can achieve convergence taking into account the ECVET approach’ (PPMI 2014: 38). In this report, as well as in Cedefop monitoring reports Poland is classified as a country in which ‘units/modules exist but no credit systems’ (PPMI 2014: 35; Cedefop 2013; 2014).

This situation motivated us to write an article, which not only presents the specificity of ECVET implementation in Poland, but also more broadly treats the understanding of ECVET implementation into national qualifications systems. We formulated three research questions to be answered in this article: (1) What does it mean to implement ECVET in a national context? (2) What conditions have to be fulfilled in order to be able to claim that a country has introduced ECVET? (3) Has ECVET been implemented in Poland?

We structured the article accordingly, dividing it into four chapters. In the first, we present the main ECVET premises. In the second chapter, we attempt to answer the first two research questions. The answers are our proposed interpretation of the ECVET Recommendation and provide the background for the description of Poland's VET reform. In the third chapter, we describe the broader context of implementing the learning outcomes approach in Poland's VET. We indicate that this process is part of a structural change in Poland's education system, not only in VET, but also in general and higher education, and that it is also linked to the work on integrating the qualifications system in Poland and implementing the national qualifications framework. In the fourth chapter, we describe Poland's VET 2012/2013 reform, and by showing how the ECVET principles have been used to modernise vocational education, we answer the third research question. In this last chapter, we provide a detailed description of Polish systemic solutions related to ECVET, however at the regulatory level. An assessment of whether the reform is a success or failure is beyond the scope of this article<sup>3</sup>.

## 1. Basic premises of ECVET

ECVET has been developed as part of the Copenhagen process, aimed at strengthening the cooperation of EU Member States in vocational education and training. Work on ECVET is also part of a broader context of work at the EU level on learning outcomes based qualifications systems to support educational and professional mobility and lifelong learning (cf. Cedefop 2009, Cedefop 2010a, Cedefop 2010b, Deji 2010,

---

<sup>3</sup> Because the first results of the 2012/2013 reform will be visible only in the coming years, it is still too early to have reliable data proving the success or failure of the reform. The first results of the evidence-based evaluation will be available in 2016, after the full round of external examinations will be conducted.

Mehaut & Winch 2011). ECVET is particularly linked to the European Qualifications Framework (EQF), to which national qualifications frameworks are referenced (cf. Le Mouillour 2012, Coles & Oates 2005), but also to other EU policy instruments: the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET)<sup>4</sup>, the validation of non-formal education and informal learning<sup>5</sup>, the Europass portfolio of documents, in which learners' qualifications and attained learning outcomes are recorded, and the European Credit Transfer and Accumulation System (ECTS) used in higher education.

The basic premise of ECVET is to base the development of qualifications on learning outcomes. Learning outcomes (LO) describe what a person knows and is able to perform, and are expressed, as in the EQF, in terms of knowledge, skills and competences. According to the ECVET Recommendation, learning outcomes should be grouped in units. Units of learning outcomes are parts of qualifications, which may be subject to separate assessment and validation. Units of learning outcomes can be developed by using various criteria.

In this way, the ECVET Recommendation invites EU Member States to modularise VET qualifications – a process which has already begun in some European countries over 20 years ago (cf. Stanwick 2009, Le Mouillour 2005). The intention of developing discrete units of learning outcomes is to make the process of obtaining qualifications more flexible, as it enables a learner to accumulate units of learning outcomes attained at different times and places, and apply (transfer) the units to different qualifications (study programmes). Comprising qualifications of units also supports the process of validating learning outcomes attained through non-formal education and informal learning (Hart, Howieson 2004). Despite these positive aspects, it should be noted, however, that the process of unitisation and modularisation as envisaged in ECVET has not been unanimously accepted by all Member States. Experts and stakeholders especially, but not only, from continental Europe (e.g. Germany, Austria) criticise this approach, arguing that qualifications should be approached in a holistic way, and that dividing the learning process into smaller, distinct parts is contrary to the concept of a 'vocation' and vocational education (Mehaut & Winch 2011, Ertl 2002).

The ECVET Recommendation also stresses the importance of partnerships and institutional networks to support the transfer of credits attained abroad and as

---

<sup>4</sup> Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training.

<sup>5</sup> Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning.

a result to support international mobility of learners. Entering into partnerships is to be supported by three elements of the ECVET system dedicated specifically to this purpose: the memorandum of understanding, the learning agreement and the personal transcript (cf. European Commission 2012).

## 2. What Does it Mean to Implement ECVET in a National Context?

The starting point in answering the question, 'what does it mean to implement ECVET' is found in the text of the ECVET Recommendation, which recommends Member States to:

- 'Promote the European Credit system for Vocational Education and Training' (ECVET) *as set out in Annexes I and II at all levels of the EQF with reference to VET qualifications*, in order to facilitate trans-national mobility and the recognition of learning outcomes in VET and borderless lifelong learning;
- create the necessary conditions and adopt measures, as appropriate, so that as of 2012 – in accordance with national legislation and practice, and on the basis of trials and testing – *it is possible for ECVET to be gradually applied to VET qualifications at all levels of the EQF*, and used for the purpose of the transfer, recognition and accumulation of individuals' learning outcomes achieved in formal and, where appropriate, non-formal and informal contexts'.

Annex I of the Recommendation presents the definitions of the following terms: qualifications, learning outcomes, unit of learning outcomes, credit of learning outcomes, competent institution, assessment of learning outcomes, validation of learning outcomes, recognition of learning outcomes, ECVET points.

Annex II of the Recommendation describes the principles and technical specifications of ECVET, stating that:

'ECVET is a technical framework for the transfer, recognition and, where appropriate, accumulation of individuals' learning outcomes with a view to achieving a qualification. ECVET tools and methodology comprise the *description of qualifications* in terms of *units of learning outcomes* with associated *points*, a *transfer and accumulation* process and complementary documents such as *learning agreements, transcripts of records and ECVET users' guides*'.

The ECVET Recommendation does not define, however, what applying ECVET to VET qualifications means in practice. From a national perspective, this is not

unequivocal, since when can it be claimed that ECVET has been implemented? The main reason for ambiguity is that it is not clear whether all of the above mentioned measures (units of learning outcomes, ECVET points, procedures for transfer and accumulation, etc.) or just some of them have to be made part of the qualifications system. Similarly, it is not clear whether Member States should focus on student mobility or systemic solutions to enhance lifelong learning or both. And since the EU documents do not explicitly and unanimously define the boundaries of ECVET implementation, EU member states interpret ECVET implementation differently. Some perceive ECVET only as an international student mobility tool, whereas others link ECVET implementation with systemic VET reforms for lifelong learning (Fietz et al. 2008, country fiches on ECVET implementation in: Cedefop 2013).

In our view, taking into account the above-mentioned ECVET Recommendation provisions, applying ECVET to VET qualifications should be viewed from three interconnected perspectives:

- 1) the architecture of VET qualifications – qualifications' requirements are expressed as learning outcomes, and learning outcomes are grouped into units, which are assigned ECVET points,
- 2) the pathways of attaining qualifications, including procedures for credit accumulation and transfer and the validation of informal and non-formal learning,
- 3) support for international student mobility through trans-national partnerships of education and training institutions using memoranda of understanding.

In other words, in our view, it can be claimed that the ECVET system has been implemented in a national context only when measures related to these three areas have been introduced into a national qualifications system. In section 4, we show how these three measures of ECVET have been applied to the formal VET system in Poland.

## **2.1. Is the Use of ECVET Points Essential to Claim that the ECVET System has been Implemented?**

ECVET points are the most controversial element of ECVET, and at the same time, they are presented as an important element of the whole system in the Recommendation. So it is worth answering the question of whether ECVET points must be adopted in order to be able to claim that ECVET has been implemented in a national system.

The crucial observation is that in the ECVET system, credits (assessed learning outcomes) not points, are accumulated and transferred. Thus, from the perspective of the main purpose of ECVET, i.e. to facilitate credit accumulation and transfer,

ECVET points should play only a complementary role and, therefore, should not constitute the essence of this system<sup>6</sup>. A similar interpretation is found in the European Commission note to members of the ECVET Users Group regarding the first ECVET evaluation report: 'Expressing credit of learning outcomes in terms of credit points has proven either too challenging or not useful enough to many of the VET providers that use ECVET, so that at this stage credit points appear as a 'secondary and marginal element' of the implementation ECVET' (European Commission 2014). In the ECVET external evaluation report we read: 'The implementation of ECVET should focus on credit as assessed learning outcomes and units of learning outcomes and it should be made clear to all stakeholders that credit points are a supplementary and secondary element of ECVET rather than its main focus' (PPMI 2014: 17).

For these reasons, we argue that ECVET points are not an obligatory measure to be able to claim that the ECVET system has been introduced into a national qualifications system.

## 2.2. Why are ECVET Points Controversial?

In accordance with the Recommendation, points within the ECVET system should be allocated in two stages. First, points are attributed to the qualification as a whole, and then to the units of learning outcomes. Assigning points to the whole qualification is done according to the criterion of the duration of the learning process for the given qualification (workload). Learning outcomes expected to be achieved in a year of formal, full-time vocational education and training are equivalent to 60 ECVET points.

Assigning ECVET points to units of learning outcomes distinguished in a qualification is done by determining the relative weight of these units. The Recommendation indicates that the relative weight of units can be determined according to the following criteria, used individually or together:

- the relative importance of the learning outcomes which constitute the unit for labour market participation, for progression to other qualification levels or for social integration,

---

<sup>6</sup> Credit points (not necessarily ECVET points) may play an important role in complementing national qualifications framework – providing 'credit metric', which would indicate the size of the qualifications referenced to NQF level descriptors. However, it is quite different than using credit points for the purpose of credit accumulation and transfer (Le Mouillour 2012).

- the complexity, scope and volume of learning outcomes in the unit,
- the effort necessary for a learner to acquire the knowledge, skills and competence required for the unit.

This ‘freedom’ in using different criteria when assigning ECVET points is controversial. Different awarding bodies may use different criteria and as a result, the same units of learning outcomes may be assigned a different number of ECVET points (cf. GHK consulting 2012: 12; ECVET projects: ASSET, OPIR and ICARE materials<sup>7</sup>). Table 1 presents the assignment of ECVET points to units of learning outcomes for the same qualification, but determined according to two different criteria: the level of effort and the importance of the learning outcomes for the performance of professional tasks.

Another controversy arises from the ECVET assumption that learning outcomes expected to be achieved during one year of full-time vocational education and training are always ‘valued’ as 60 ECVET points. However, it may happen that the ‘volume’ of learning during one year of formal, full-time education will require a different workload (measured in notional learning hours)<sup>8</sup>, a situation which is not envisaged in the ECVET Recommendation.

### 3. The Broader Context of Implementing Learning Outcomes in Poland’s VET

Introducing a learning outcomes approach in Poland’s vocational education and training system is part of a broader context of change in the formal general and vocational education system [*system oświaty*]<sup>9</sup>, as well as reforms intended to adapt

<sup>7</sup> <http://www.assetecvet.eu/>; <http://freref.eu/opir/index.php>, <http://www.icareproject.eu/>

<sup>8</sup> During 2012/2013, we conducted pilot work on measuring the volume (workload) of formal VET qualifications in Poland (within the systemic project entitled *The development of terms of reference for the implementation of the National Qualifications Framework and the National Qualifications Register for lifelong learning* conducted under supervision of the Ministry of Education). The research indicated that different VET qualifications achieved in Poland during 3 years of formal, full-time education require different student workloads (Stęchły, Dębowski, Lewicki 2013).

<sup>9</sup> The Poland’s national education system is divided into ‘system oświaty’ and higher education. Many documents on Poland’s education translate the term ‘system oświaty’ into ‘education system’. However, such terminology lacks precision for two reasons: it does not refer directly to vocational education, which is an integral component of ‘system oświaty’ and may suggest that it also includes higher education. For this reason, ‘system oświaty’ is being translated in this article as ‘the formal general and vocational education system’.



**Table 1. Example of assigning ECVET points to a hypothetical qualification of sales assistant and to individual units of learning outcomes, according to the criterion of effort (Table 1a) and the importance of the learning outcomes to performing the tasks of the occupation of salesperson (Table 1b)**

<b>Table 1a. Assigning ECVET points according to the criterion of effort</b>				
Title of the qualification	Title of the unit of learning outcomes	Effort required for specific units	Weight of the unit according to the criterion of effort	Number of ECVET points assigned
Sales assistant	Customer services	600 h	$600/1800=0.3$	<b>20 ECVET points</b> $60 \cdot 0.3=20$
	Cash machine operation and basics of accounting	600 h	$600/1800=0.3$	<b>20 ECVET points</b> $60 \cdot 0.3=20$
	Taking orders and receiving goods	300 h	$300/1800=0.15$	<b>10 ECVET points</b> $60 \cdot 0.15 =10$
	Product display	300 h	$300/1800=0.15$	<b>10 ECVET points</b> $60 \cdot 0.15 =10$
		total of 1800 h, <b>60 ECVET points</b> (this number is the base used in the 'weighting' procedure)	= 1	= 60 ECVET points
Note: It was assumed that the hypothetical qualification of sales assistant presented below could be achieved within one year of formal education and would require an average of 1800 hours of effort.				
<b>Table 1b. Assigning ECVET points according to the criterion of the importance of the learning outcomes to performing the occupation (professional tasks)</b>				
Title of the qualification	Title of the unit of learning outcomes	Effort required for the qualification as a whole	Weight of the unit according to the criterion of the relative importance of learning outcomes to labour market participation	Number of ECVET points assigned
Sales assistant	Customer services	600 h	0.5	<b>30 ECVET points</b> $60 \cdot 0.5=30$
	Cash machine operation and basics of accounting	600 h	0.2	<b>12 ECVET points</b> $60 \cdot 0.2=12$
	Taking orders and receiving goods	300 h	0.1	<b>6 ECVET points</b> $60 \cdot 0.1 =6$
	Product display	300 h	0.2	<b>12 ECVET points</b> $60 \cdot 0.2 =12$
		total of 1800 h, <b>60 ECVET points</b> (this number is the base used in the 'weighting' procedure)	= 1	= 60 ECVET points

Source: Own work.

the system of vocational education and training to the needs of society and the labour market. The implementation of learning outcomes in VET should also be seen in the context of modernising the qualifications system in Poland and developing a national qualifications framework. These three aspects are discussed the sections below.

### 3.1. Implementing Learning Outcomes in the Formal General and Vocational Education System

The formal vocational education system is part of the formal general and vocational education system, which is the responsibility of the Ministry of National Education. The process of modernising this system, which led to the implementation of a learning outcomes approach, began in the late 1990s (cf. Dąbrowski and Wiśniewski 2011).

In 1999, a core curriculum was introduced to formal general education. It defined the overall educational objectives and framework of the general education offer. As a result, schools were able to independently develop their own teaching programmes, but they no longer assessed and validated the competences of their students. This responsibility was given to the Central Examination Board and Regional Examination Boards (REB) – institutions supervised by the Ministry of National Education.

In 2002, the first external examinations for primary and lower secondary school pupils were conducted. In 2005, the first external upper secondary school completion examinations (the so-called ‘new *matura*’) were conducted. In general education, the learning outcomes achieved through non-formal and informal learning could now be validated – from this time forward, each certificate awarded by the formal general education system, i.e. certificates of completing primary school, lower secondary school, general upper secondary school and the *matura* certificate, can be attained by adults through validation of non-formal and informal learning without being required to complete a formal educational process.

The next phase of the reform within the formal general education system was designing core curricula by using learning outcomes. A new core learning outcomes based curriculum in general education was implemented as of the 2009/2010 school year. As a result, examination standards ceased to be defined separately. Examination content is now based only on the learning outcomes specified in the core curriculum.

Therefore, changes within the Poland’s formal vocational education and training system complement the reform of general education that introduced curricula and

assessment based on learning outcomes (see section 4). In this way, the entire formal school system in Poland is based on the learning outcomes approach.

### 3.2. Modernisation of Poland's VET

As in other countries of the Eastern bloc, Poland's VET regressed with the transition from a centrally planned to a market economy after 1989 (cf. Adamski et al. 1993, Shaw 1995, Parks ed. 1998, Kwiatkowski 2000a). As large state-owned enterprises were closed, so were the vocational schools functioning alongside them; they were not replaced with new schools. This was due, on one hand, to insufficient funds (low expenditures for VET), and on the other hand, to the popular belief at the time that vocational education was too expensive and held no future for Poland's economic development. Because general skills were seen to be the most important in the contemporary labour market, the Poland's school system entered a path of 'de-vocationalisation' – the vocational component was being pushed out from vocational schools in compulsory education to institutions offering continuing and adult VET. The promotion of general and higher education became one of the main objectives of the changes in Poland's education. The belief about the importance of the general education component was strengthened by the fact that during economic transformation, wage disparities among professional groups and by level of education radically increased (Puhani 2000; Roszkowska and Majchrowska 2014; Rutkowski 2001, Rutkowski 1996). The increase in the salaries of persons with higher education and the rising unemployment rate of persons with basic vocational education additionally strengthened the negative perception of selecting vocational school as an educational path.

Despite these problems, VET was not the object of reform or intensified corrective actions during the entire transition period (Chłoń-Domińczak et al. 2011; Kabaj 2012; Kwiatkowski 2000b; Kurek & Rachwał 2012). At the beginning of 2010, the most important problems of vocational education were determined to be: the inadequacy of the educational offer to the needs of the labour market, outdated curricula, poorly equipped educational facilities, low involvement of employers, the poor quality of vocational training, and the depreciation of vocational education in the public eye (Osiecka-Chojnacka 2007; Kabaj 2010).

Only recently vocational education has been regaining its position among national policies (Chłoń-Domińczak et al. 2011). Restoring the importance of

vocational education and creating an attractive educational offer for young people and adults have become one of the national priorities, reflected in recent national and regional strategic documents and actions (Lifelong Learning Strategy 2013, Strategy for Human Capital Development 2013, The National Reform Programme for the implementation of the Europe 2020 strategy). One of the most important objectives of reform measures was the implementation of a learning outcomes based curriculum and assessment to better adapt the VET educational offer to labour market needs. And although introducing a learning outcomes approach is seen as a crucial element of the reform, it is embedded in other activities undertaken at the governmental level to modernise Poland's VET, among others: infrastructure development (equipping workshops), strengthening and promoting cooperation between vocational schools and employers, teacher and management staff training and development of career counselling, improving the image of vocational education learners (Chłoń-Domińczak 2012).

In the context of these activities, the significance of the impact of educational policies developed at the European Union level should also be noted. The importance of VET as a policy area in European strategies has impacted the amount of funds available for use by Poland from the European Social Fund. These financial measures provide an additional impetus to the reform efforts at the national and regional levels. In the new financial perspective 2014-2020 ca. 1,2 billion euro<sup>10</sup> will be made available to help reach these goals in national and regional operational programmes (for comparison, annually ca. €1,9 billion is spent on the upper-secondary VET in Poland from the state budget (central and local)<sup>11</sup> . This impact is also reflected in the number of governmental systemic projects aiming at modernize VET system in Poland which are financed from the ESF funds systemic, see Table 2.

---

<sup>10</sup> Own calculation based on data available on the Polish European funds portal [www.funduszeuropejskie.gov.pl](http://www.funduszeuropejskie.gov.pl). For comparison, annually ca. €1,9 billion is spent on the upper-secondary VET in Poland from the state budget (central and local).

<sup>11</sup> Source: Eurostat.

**Table 2. VET related systemic projects carried out by institutions supervised by the Ministry of Education, financed from the ESF funds (2008–2016)**

Title of the project	Managing institution	Years of implementation (project budget)
Core Curriculum Improvement as a Key to Modernisation of VET	National Centre for Supporting Vocational and Continuing Education	2008–2013 (€5,4 mln)
Developing a Model of Career Guidance and Online Education and Career Information System	National Centre for Supporting Vocational and Continuing Education	2009–2012 (€1,4 mln)
Support System for Schools & Educational Institutions Implementing Modular VET Programmes	National Centre for Supporting Vocational and Continuing Education	2009–2012 (€2,5 mln)
Vocational School, the School of Positive Choice	National Centre for Supporting Vocational and Continuing Education	2010–2013 (€5 mln)
A Model for the System of Implementing and Propagating Distance Learning in Lifelong Learning	National Centre for Supporting Vocational and Continuing Education	2010–2013 (€5,4 mln)
Modernization of VET Examinations	Central Examination Commission	2010–2014 (€11,5 mln)
Monitoring and Improvement of the Implementation of VET Core Curricula	National Centre for Supporting Vocational and Continuing Education	2012–2015 (€2,1 mln)
Education for Employment, phase 1	National Centre for Supporting Vocational and Continuing Education	2013 (€1,1 mln)
Education for Employment, phase 2	National Centre for Supporting Vocational and Continuing Education	2014–2015 (€4,5 mln)
The Development of Terms of Reference for the Implementation of the National Qualifications Framework and the National Qualifications Register for Lifelong Learning	Educational Research Institute	2010–2015 (€10,7 mln)
Developing the National Qualifications System – Pilot Implementation of the National Qualifications System and its Promotional Campaign	Educational Research Institute	2013–2015 (€3,9 mln)

Title of the project	Managing institution	Years of implementation (project budget)
Developing the National Qualifications System – Organizing and Institutionalising the Integrated Qualifications Register	Educational Research Institute	2013–2015 (€1,5 mln)
Partnership for Vocational Education and Training	Centre for Education Development	2016–2017 (€2,5 mln)
Support to Central Government Administration, Awarding Bodies and Quality Assurance Institutions in Implementing Stage I of the Integrated Qualifications System	Educational Research Institute	2016–2018 (€4,25 mln)
Effective Vocational Counselling for Children, Youth and Adults	Centre for Education Development	2016–2018 (€1 mln)

### 3.3. Work on Integrated the Qualifications System

Parallel to reforms in the formal general and vocational education (*system oświaty*), the learning outcomes approach has also been introduced within the higher education system. National qualifications frameworks for higher education (NQF-HE) were introduced by law in 2011. Since then, each study programme (for a licentiate/engineer or master's degree) in Poland's higher education system must be described with the use of learning outcomes and must be referenced to the level descriptors of the NQF-HE (cf. Chmielecka et al. 2012; Kraśniewski 2012). In August 2014, the president of the Republic of Poland signed amendments to the Law on Higher Education introducing new solutions to validate non-formal education and informal learning. Under the new regulations, higher education institutions will be able to recognise up to 50% of ECTS credits of a given study programme for learning outcomes attained by adult students through non-formal and informal learning pathways.

In effect, the approach of developing qualifications that takes into account learning outcomes, their transfer, validation and quality assurance in accordance with European standards, has been introduced to the entire formal education system in Poland (general, vocational and higher).

The introduction of a national qualifications framework in Poland, which includes all types of education (formal and non-formal), is therefore seen as an action that will conclude the series of reforms in the formal education system and provide a new

impetus for change in non-formal education, allowing for the greater integration of Poland's qualifications system (Sławiński & Dębowski 2013). One of the key premises of the integrated qualifications system is that all qualifications (awarded in formal and non-formal sectors) referenced to the Polish Qualifications Framework (PQF) will have to be described according to the same standard. This is very important from a credit transfer perspective – an important barrier to credit transfer is the lack of uniformity in describing learning outcomes and validation methods by different awarding bodies. Therefore, implementing an integrated qualifications system based on the PQF and common description standards will not only facilitate greater understanding of the qualifications for persons seeking to attain them, but also enhance credit transfer between qualifications awarded in different sub-sectors. Therefore, integrating the qualifications system will also provide opportunities for incorporating ECVET principles in vocational education outside of the formal education system.

## **4. Implementing the ECVET Principles in Poland's VET?**

This section presents the implementation of the learning outcomes approach in Poland's vocational education system. It also shows that the ECVET system has been implemented in Poland's formal vocational education system, according to the three criteria discussed in section 2: the architecture of VET qualifications; the pathways of attaining qualifications; and, support for international student mobility.

### **4.1. The architecture of VET qualifications**

The basis for preparing the educational offer in vocational education in Poland is defined at the level of the Ministry of National Education and includes: the Classification of Occupations for Vocational Education (COVE), the Core Curriculum for Vocational Education (CCVE), as well as the Core Curriculum for General Education (CCGE).

A vocational school director decides which occupations will be taught in school, with the Classification of Occupations for Vocational Education defining the range of

possible choices. The VET school study programmes are based on the content of the CCVE and CCGE<sup>12</sup>. The core curricula define the learning outcomes that should be attained by persons with vocational qualifications and general education certificates of completion of vocational school (cf. Stęchły *et al.* 2013; Dębowski 2012; Dybaś 2014).

#### 4.1.1. Distinguishing qualifications in occupations learned at school

A key element of the changes associated with the introduction of the learning outcomes approach in Poland's VET is distinguishing vocational qualifications in COVE occupations. The COVE includes 'occupations' (i.e. compound qualifications) that the schools can offer. Constituent qualifications are distinguished in specific occupations, each comprised of defined units of learning outcomes (ULO) and individual learning outcomes (LO). The COVE includes 200 occupations, in which 251 qualifications are distinguished. The occupations included in this new classification are comprised of one, two or three qualifications. The CCVE defines learning outcomes for each occupation and qualification<sup>13</sup>. This is why the Poland's vocational education and training system has two types of documents confirming attained learning outcomes (competences) – vocational certificates and vocational diplomas. Attaining qualifications (vocational certificates) required for a given occupation, together with possession of a school leaving certificate, enables a pupil to obtain a vocational qualification (compound qualification) (see Figure 1).

Distinguishing individual qualifications in occupations is aimed at enabling greater flexibility in the learning process, better adapting it to the needs and abilities of individual learners, and also facilitating the ability of vocational education to respond to changing labour market needs. When demand for a specific bundle of competences emerges, it will be much easier to design a qualification, instead of an 'occupation' with a large volume. From a learner's perspective, it will be much easier to acquire and validate these new competences (see section 4.2.2). Previously, a learner who wanted to achieve a vocational diploma was required to complete a full cycle of education for each occupation studied, either in a basic vocational school (2 or 3 years of education) or technical school (4 years of education). Given the dynamic pace of economic change, this requirement resulted in a large gap between the educational offer of vocational schools and labour market demand, very often discouraging adults

---

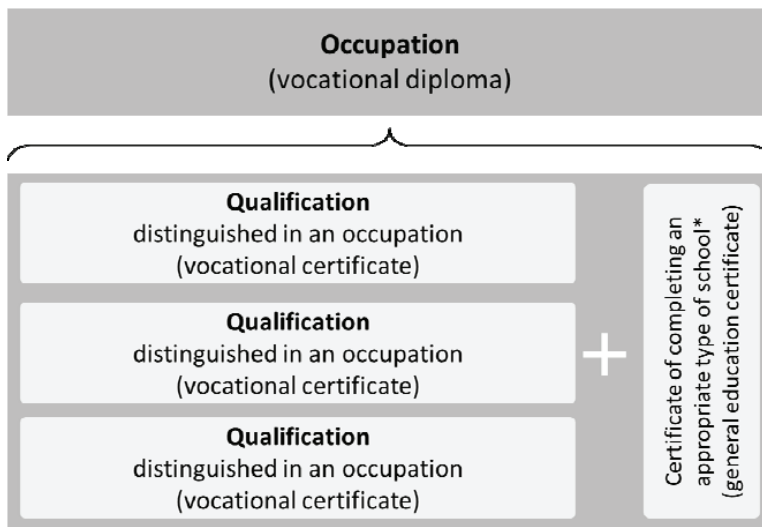
<sup>12</sup> Or a school can use the model study programmes developed by KOWEZiU (National Centre for Supporting Vocational and Continuing Education).

<sup>13</sup> The understanding of the concept of a qualification in COVE is consistent with the definition in the ECVET Recommendation. In both documents, a qualification is understood as a defined set of learning outcomes, attained by a learner and confirmed by a relevant document (certificate, diploma).



from participating in lifelong vocational learning – not many individuals could afford to spend 4 years at a school for adults in order to receive a VET diploma.

**Figure 1. Distinguishing qualifications in the occupations listed in the COVE**



To be awarded a diploma confirming a vocational qualification attained at school, a pupil must achieve all the qualifications distinguished in the given occupation (vocational certificates) and the certificate of completing an appropriate type of school. The qualifications (vocational certificates and certificate of completing school) can be attained at different times and through the validation of non-formal and informal learning.

\*Depending on the vocational diploma, different certificates of completing school are required, e.g. in order to receive the vocational diploma of Electrical Mechanic, a learner must receive a certificate of completing basic vocational school, whereas in order to achieve an Electrical Technician diploma, a learner must attain a certificate of completing technical upper secondary school.

Source: own work.

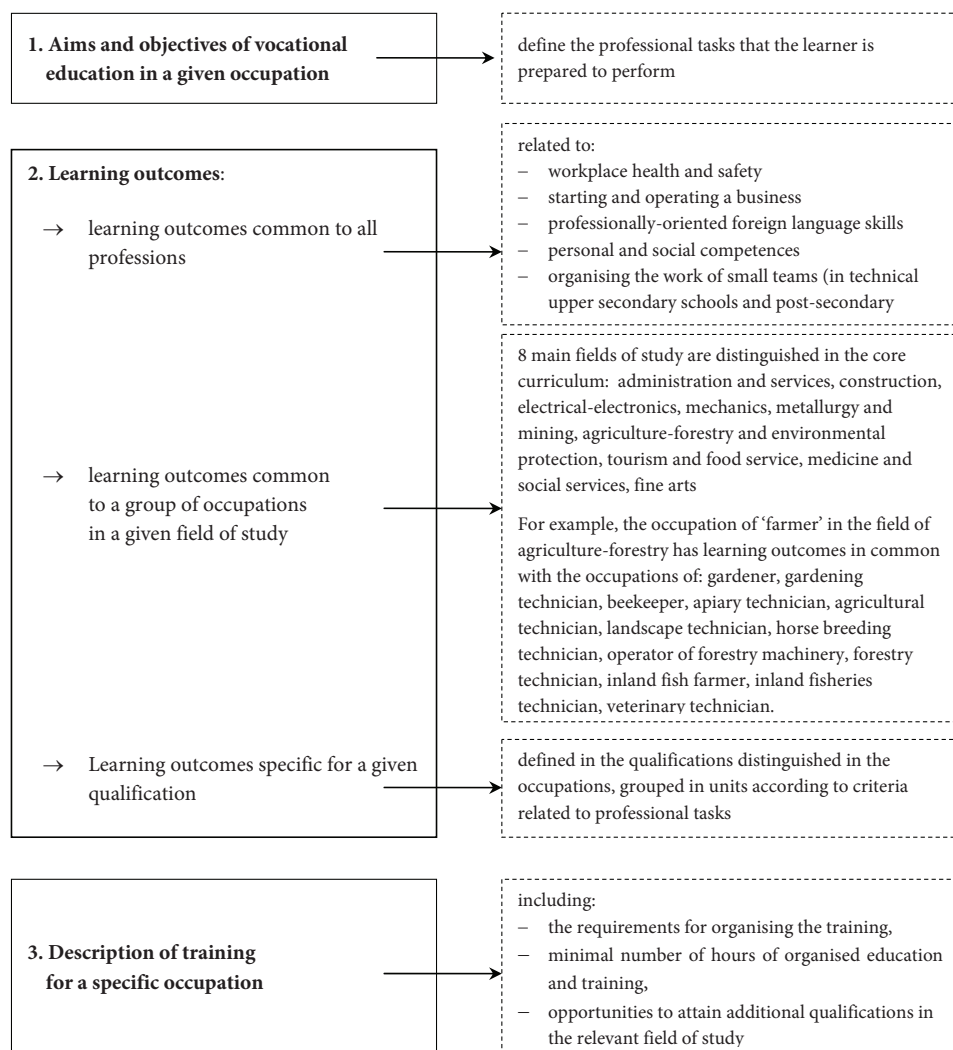
#### 4.1.2. Learning Outcomes Based Curricula

The core curriculum for vocational education (CCVE) implemented as of September 2012 describes qualifications and occupations with the use of learning outcomes that describe knowledge, skills and personal and social competences. Learning outcomes are grouped in units, which typically contain from several to over a dozen learning outcomes and reflect specific professional tasks. A unit of learning outcomes encompasses a logical and mutually related process leading to a specific objective, which may be the implementation of a specific product, service or decision.

Learning outcomes are described according to 'factoring out' logic, meaning that first, the educational aims for a given occupation are described, next – the learning

outcomes common to all occupations are defined, after this – the learning outcomes common to a given group of occupations, and only then are the learning outcomes for the specific occupation defined (for specific qualifications distinguished in the occupation). Figure 2 presents the structure of the entries in the CCVE.

**Figure 2. The structure of the entries in the core curriculum for vocational education**



Source: own work.

### 4.1.3. The Model of VET Curriculum

The new VET qualifications' architecture in Poland may be seen as an example of a two-tiered model of curriculum modularisation (or unitisation in some countries). The tiers refer to: (1) qualifications distinguished in occupations and (2) units of learning outcomes defined for qualifications.

On one hand, qualifications distinguished in occupations are what Le Mouillour (2005) defines as 'self-contained' partial qualifications – described with LO and certified individually by a vocational certificate. On the other hand, qualifications formally remain parts of an occupation (or occupations), certified by a vocational diploma – in this sense they are 'part of a whole, as they are designed to lead to an established qualification' (Le Mouillour 2005). For some qualifications, the modular structure of Poland's VET corresponds to the 'expansion concept' described by Ertl (2002), as modularisation makes credit accumulation possible by having subsequent modules added to previously attained qualifications (see Figure 3).

At the lower tier, units (sets) of learning outcomes have been defined for qualifications. They are not certified and recognised on their own, have no inherent value, and function only as parts of the qualification. Furthermore, the sets of learning outcomes at this tier have been defined with regard to both the didactical process and the outcome. This means that LO common to several qualifications/professions are defined from a curricular-didactical perspective and units specific to a qualification are based on the competency and work-context approach (see Figure 2).

The Polish model of qualifications' architecture and the qualification-occupation relationship can be seen as an interesting approach to VET modernisation, which combines the characteristics of the occupation-based and modular approaches (see: Pilz 2002; Hart, Howieson 2004).

## 4.2. Introducing Flexible Learning Pathways

In this section, we discuss aspects of the changes that are aimed at creating more flexible learning pathways. First, qualifications have been distinguished within occupations (the qualifications are significantly smaller than the previously awarded diplomas), thus providing opportunities for credit accumulation and transfer. Second, the ability to validate learning outcomes acquired through non-formal education and informal

learning has been expanded. Third, new forms of education have been developed, in particular, vocational qualifying courses and vocational skills courses for adults.

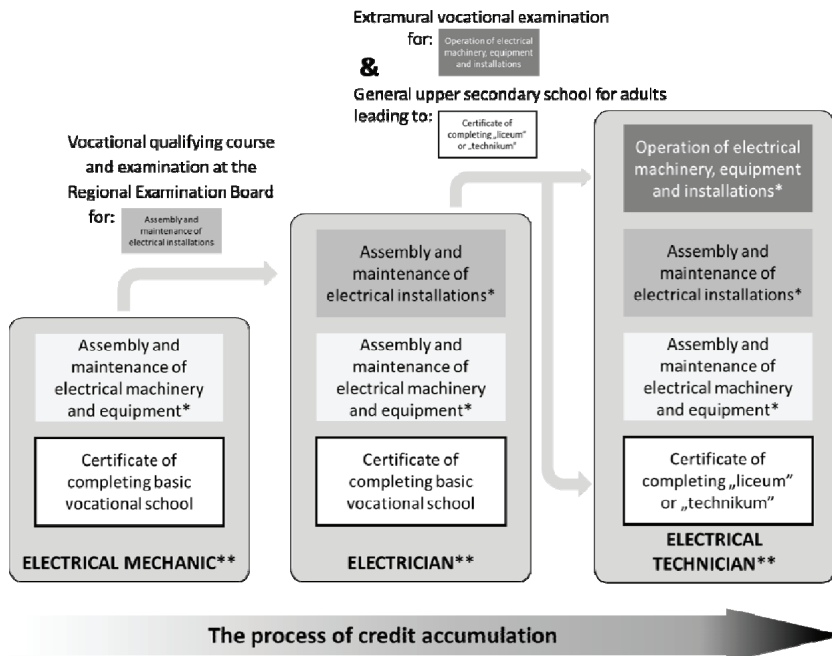
#### 4.2.1. Credit Accumulation and Transfer

Accumulating and transferring credits in Poland's VET (within the formal general and vocational education system) can be considered from the perspective of attaining a vocational diploma or vocational certificate<sup>14</sup>.

##### Credit Accumulation and Transfer to Obtain a Vocational Diploma

The newly introduced VET qualifications' architecture opens up the opportunity to gain additional qualifications without having to start learning each profession 'from the beginning', by adding subsequent qualifications to those already attained. In the context of ECVET, this can be called the accumulation of credits. The accumulation process is described in Figure 3.

**Figure 3. Accumulating credits to attain a vocational diploma, using the example of *electrical technician***



\* Vocational certificate

\*\* Vocational diploma

Technikum – vocational upper secondary school; Liceum – general upper secondary school

<sup>14</sup> The distinction between these is described in section 4.1.1 (see Figure 1.)

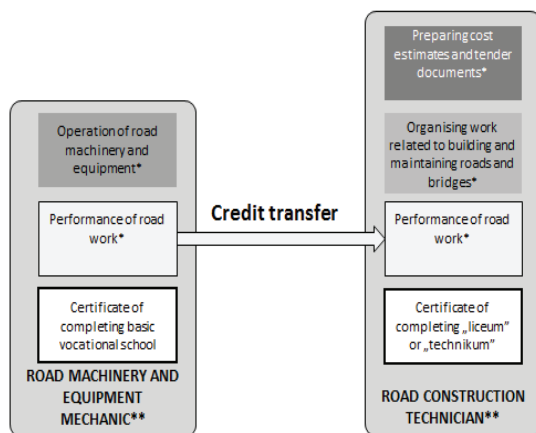
After completing basic vocational school and attaining the qualification distinguished in the occupation of 'electrical mechanic' ('assembly and maintenance of electrical machinery and equipment'), graduates can continue their vocational education by attending, for example, a vocational qualifying course.

After completing the relevant vocational qualifying course, learners can take the examination to attain the qualification of 'assembly and maintenance of electrical installations'. Having attained this qualification, learners are awarded a diploma confirming the vocational qualification of the profession of 'electrician'.

After fulfilling the relevant requirements related to, among others, the time spent working in a profession or the duration of education, learners can take an extramural vocational examination and attain the qualification of 'operation of electrical machinery, equipment and installations'. Finally, learners can achieve the compound qualification of 'electrical technician', but only if they obtain the appropriate level of general education. This can be done by attending a general upper secondary school for adults or by taking extramural examinations in the subjects of the mandatory classes defined in the study programme of the general secondary school for adults.

Selected qualifications can also be 'transferred' among occupations in the Poland's formal general and vocational education system. In the context of the ECVET process, this can be called credit transfer (see Figure 4).

**Figure 4. Transferring credits to achieve a vocational diploma, using the example of the qualifications of Road machinery and equipment mechanic and Road construction technician**



\*Vocational certificate

\*\*Vocational diploma

Technikum: vocational upper secondary school, Liceum: general upper secondary school

A person awarded the vocational diploma of 'road machinery and equipment mechanic', comprised of two separate qualifications ('operation of road machinery and equipment' and 'performance of road work'), who wants to attain 'road construction technician' can transfer the learning outcomes required for the qualification of 'performance of road work'. As a result, the learner will not have to participate in the education process nor take the examination for this vocational qualification.

It should be noted that what is transferred are the learning outcomes, which have been confirmed by a vocational qualification (certificate), awarded after having passed a vocational examination conducted by the Regional Examination Board.

Source: own work.

## Credit Accumulation and Transfer to Obtain a Vocational Certificate

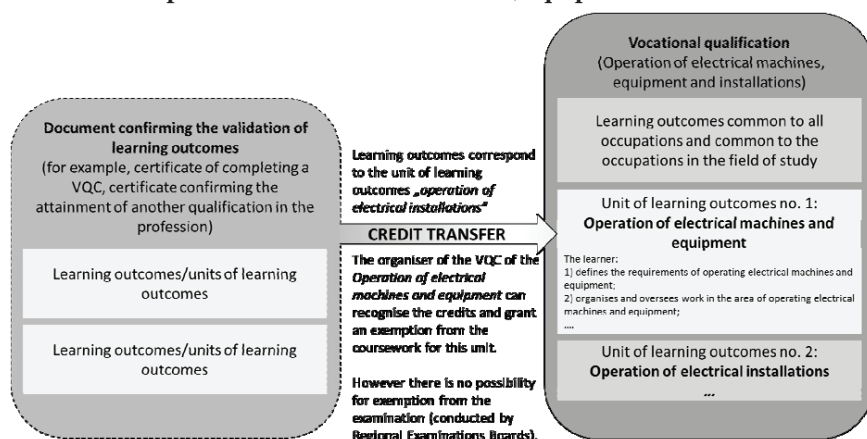
A vocational certificate can be attained only by passing an external vocational examination conducted by the Regional Examination Board (REB).

The examination can be taken by pupils and graduates of basic vocational, vocational upper secondary and post-secondary schools, as well as persons who have completed vocational qualifying courses. Persons who have completed lower secondary school and at least two years of training or work in a given occupation can take an extramural examination.

No exemptions from any part of the examination requirements are foreseen. The scope of the vocational examination conducted by the REB includes all of the learning outcomes required for a given qualification.

Persons taking vocational qualifying courses will be able to accumulate credits attained, among others, from vocational skills courses (VSC). A learner can apply for an exemption from classes/training in relevant subjects or learning outcomes that have already been attained through prior learning if the entity offering the vocational qualifying course provides such an option (see Figure 5).

**Figure 5. Credit transfer for the purpose of attaining a vocational certificate, using the example of the qualification of ‘operation of electrical machines, equipment and installations’**



Suppose that an adult wants to attain the qualification of ‘operation of electrical machinery, equipment and installations’. To do so, he/she enrolls in a vocational qualifying course and after its completion, takes the vocational examination.

However, the person already has learning outcomes validated earlier (for example, through completion of a vocational skills course) that correspond to one unit of the learning outcomes specified for this qualification (for example, 'operation of electrical machinery and equipment'). The achieved learning outcomes are confirmed by a document (certificate of completing the Vocational Skills Course).

By presenting this document, the learner can request an exemption from having to take some of the coursework in the qualifying course. The decision to grant such an exemption is made by the entity offering the qualifying course. It should be noted, however, that the entity offering the Vocational Qualifying Course is required to grant the exemption to the extent that is permitted by the manner in which the qualifying course is organised. After completing all the coursework required by the VQC curriculum, the learner obtains a certificate of completion for the course, which entitles him/her to take the vocational examination.

Transferring credits in such a case may be of great benefit to learners, who may not have the time and ability to complete coursework on previously acquired knowledge and skills because they need to reconcile work and family responsibilities.

Source: own work.

Pupils undertaking their education in vocational schools can transfer credits and have them recognised in the form of 'passing' internships/compulsory work placements held abroad (see section 4.2.4).

### **Validating of Non-Formal Education and Informal Learning**

As of the 2012/2013 school year, the system of attaining vocational qualifications was broadened to include persons learning out-of-school or in the course of their work. Previously, persons who completed non-school forms of education, as well as those whose vocational competences were acquired at work or through informal learning, were unable to have their learning outcomes formally validated in the examination system organised by Regional Examination Boards (REB).

Currently, the School Education Act stipulates that persons 18 years of age and older who are not in school can take extramural examinations conducted by Regional Examination Boards<sup>15</sup>. After they have been passed, an appropriate (general or vocational) qualification is awarded. As a result, all the certificates and diplomas awarded in the Poland's formal education system can be attained through the validation of non-formal and informal learning. However, it should be noted that currently, the only way to validate vocational competences acquired informally and

---

<sup>15</sup> Extramural examinations may be taken by persons who have completed lower secondary school or an eight-year elementary school and have at least two years of training or work in the occupation, which is part of the given qualification. Documents confirming the fulfilment of these requirements are, in particular, school certificates, indexes, education certificates or employment certificates related to work in a specific profession, including those obtained abroad (indicating that one may use documentation obtained within the framework of ECVET mobility).

out-of-school is by taking a vocational examination (Polish solutions do not anticipate the use of other methods, such as portfolios, observation or document analysis).

### 4.2.3. Introducing New Learning Pathways

Non-school forms of learning for adults are an important approach in developing flexible learning pathways. Previous solutions in this area were not sufficiently tailored to the needs of adults due, on one hand, to the lack of suitably small qualifications, and on the other hand, to the lack of attractive forms of adult education (among others, the currently eliminated vocational schools for adults). As part of modernising the VET system, new forms of education have been introduced, of which the most important are:

- vocational qualifying courses – organised within the scope of a single qualification. Completion of the course allows a learner to take a REB examination and attain the qualification (the same one a learner would achieve in a vocational school),
- vocational skills courses – organised within the scope of selected units of learning outcomes or groups of learning outcomes specified in a qualification. Successfully completing the course leads to a certificate of completing a vocational skills course, which is the basis for allowing exemptions from part of a VQC (see Figure 5),
- general competences courses – courses on specific parts of the core curriculum for general education,
- education courses on theoretical aspects for young workers – organised for pupils receiving their education in the workplace or when school training does not provide the theoretical portion of the vocational education.

As a result, learning pathways within the education system have become more transparent. Young persons can attend three-year basic vocational schools and four-year technical upper secondary schools (or alternatively be trained in the craft trades), while adults can attend vocational qualifying courses and vocational skills courses<sup>16</sup>.

### 4.2.4. International Mobility

One of the reasons for implementing ECVET is to support the international mobility of learners. In this context, it should be noted that the ECVET system is often used as a tool to organise mobility leading to the recognition of learning outcomes acquired

---

<sup>16</sup> However, education is provided only in post-secondary schools for some occupations (for example, most medical occupations).



abroad among several entities in different countries. Each year, growing numbers of VET providers in Poland organise international mobility projects using ECVET. In this article, however, we focus on the systemic implementation of selected ECVET principles in Poland, and its possible impact on student mobility is treated as one many aspects.

First of all, we assume that introducing learning outcomes as the primary point of reference in developing VET qualifications and learning programmes will make it easier for Poland's VET providers to discuss and compare learning outcomes with their foreign partners. This should also make it easier to indicate the additional credits earned by learners in the Europass mobility document.

Second, because pupils can more freely shape their learning pathways, incorporating a period of internship or work experience abroad may be easier and less risky (i.e. at the moment of deciding to go abroad, the pupil may already possess confirmed qualifications and does not risk interrupting a long cycle of education and, as a consequence, failing to obtain the qualification).

However, there are some organisational issues in Poland's VET limiting the ability to recognise credits after mobility:

- the size of the units of learning outcomes defined in the core curriculum is rather 'large' (requiring at least several months of study), whereas most of the mobility periods are short (several weeks),
- VET certificates and diplomas are centrally administered and not awarded by VET providers but by Regional Examination Boards. Therefore, learners cannot be exempted from the final assessment or any part of it. The examination conducted by the REB will always include each learning outcome defined in the core curriculum for vocational education.
- VET school pupils have a relatively large general education component. This means that after the mobility period, school pupils have to catch up with the 'general' part of the study programme. Thus, international mobility does not shorten the time of learning in the home school. This problem does not occur in the case of persons taking vocational qualifying or skills courses, because they do not include a general education component.

The solutions introduced in Poland's VET system provide for the recognition of learning outcomes attained abroad. Vocational school pupils may be exempted from all or part of professional practice in the country – the school director can treat

educational mobility as fulfilment of this requirement. A special case is the ability to have practicums performed abroad count towards a period of two years of training or work in the occupation, required for being allowed to take extramural examinations.

There is not enough evidence yet that these changes have influenced the mobility of pupils – both internationally and domestically. Surely the number of VET mobility projects organised through the National Agency of the Erasmus + Programme is steadily increasing. However, it is difficult to assess the extent to which this is a consequence of the described changes.

## Conclusions

The VET reform of 2012 in Poland has implemented most of the ECVET principles as specified in the ECVET Recommendation. These especially include:

- distinguishing separate qualifications in school-learned occupations (included in the Classification of Occupations for Vocational Education) and individually validating each qualification,
- introducing learning outcomes and units of learning outcomes – qualifications are described using learning outcomes, which are grouped in units of learning outcomes (modules) according to criteria consistent with ECVET,
- developing flexible learning pathways by enabling credit accumulation and transfer between occupations and qualifications, as well as introducing new forms of non-school education,
- opening the system to the validation of non-formal and informal learning by enabling diplomas and certificates awarded by Regional Examination Boards to be attained after the required extramural examinations are passed.

The reforms relate to a lesser extent to the use of ECVET in promoting the transnational mobility of learners. Even though the new solutions in Poland's VET allow learning outcomes achieved abroad to be recognised so that the training time can be shortened, it is not possible to gain exemption from any part of the vocational examination requirements. To obtain a vocational qualification in Poland's formal VET system, a learner must pass the examination conducted by the REB, and this examination always includes all of the learning outcomes in the core curriculum for vocational education.

Poland does not anticipate using ECVET points. Although during work on the integrated qualifications system, the significance of a consistent and ECTS-compatible system of credit accumulation and transfer for lifelong learning policies at all PQF levels was acknowledged, at this stage, it is too early to discuss how points might be implemented in the Poland's qualifications system.

Taking the above into account, we believe it can be said that ECVET has been implemented in the Poland's formal VET system, and thus Poland has fulfilled the declarations made in the EU forum. It should be noted, however, that the changes have been made at the regulatory level. In order to fully implement the learning outcomes based approach in Poland's VET, the behaviour of key actors – teachers, examiners, as well as the people developing vocational examinations – will need to change.

The changes described only apply to formal VET. From the point of view of ECVET, integrating formal VET with the non-formal system will be a challenge. Developing truly flexible learning pathways (offering both horizontal and vertical permeability) in Poland's qualifications system will require not only the development of zones of mutual trust among partners (who have not yet worked together on broader issues), but also systemic solutions (among them, the quality assurance of qualifications and the methodology of describing qualifications) to integrate the formal (school-based) and non-formal sector of education. It is hoped that the work just begun on the Act for an integrated qualifications system will achieve this.

In analysing the activities carried out to introduce a learning outcomes approach in Poland's VET, it must also be remembered that they are part of broader educational reform measures in Poland (the introduction of learning outcomes in general and higher education), as well as efforts to modernise the formal VET system. This modernisation includes investing in the educational infrastructure, preparing teachers, trainers and management staff to implement new solutions, modernising vocational examinations, strengthening cooperation between schools and employers, and developing a system of career counselling.

We can anticipate a positive impact on the quality of vocational education and training in Poland only when all these VET initiatives are put in place. However, we will not be able to conduct a reliable, evidence-based evaluation of the effects of the 2012 reform and the introduction of the learning outcomes approach until several years of implementation have passed.

## References

- Adamski, W., Baethge, M., Bertrand, O., Grootgings, P., Józefowicz, A. (1993), *Edukacja w okresie transformacji. Analiza porównawcza i propozycje modernizacji kształcenia zawodowego w Polsce [Education during transformation. Comparative analysis and proposals for modernising VET in Poland]*, Warszawa: IFiS PAN
- Cedefop (2009), *The shift to learning outcomes. Policies and practices in Europe*, Luxembourg: Office for Official Publications of the European Communities: Cedefop Reference series 72
- Cedefop (2010a), *Changing qualifications. A review of qualifications policies and practices*. Luxembourg: Publications Office of the European Union: Cedefop Reference series 84
- Cedefop (2010b), *The development of ECVET in Europe*. Luxembourg: Publications Office of the European Union: Working Paper 10
- Cedefop (2010c), *Linking credit systems and qualifications framework. An international comparative analysis*
- Cedefop (2013), *Monitoring ECVET implementation strategies in Europe*. Luxembourg: Publications Office of the European Union: Working Paper 18
- Cedefop. (2014), *Monitoring ECVET implementation strategies in Europe in 2013*, Luxembourg: Publications Office of the European Union: Working Paper 22
- Chłoń-Domińczak, A., Dębowski, H., Drogosz-Zabłocka, E., Dybaś, M., Holzer-Żelaźewska, D., Maliszewska, A., Paczyński, W., Podwójcic, K., Rucińska, M., Stęchły, W., Tomasik, M., Trawińska-Konador, K., Ziewiec, G. (2012), 'Edukacja zawodowa w Polsce' ['Vocational education in Poland'], in: Wojciuk, A., Fedorowicz, M. (eds.), *Raport o stanie edukacji 2011. Kontynuacja przemian [Report on the state of education in 2011. Continuing reforms]*, Warszawa: Instytut Badań Edukacyjnych: 169–249
- Chmielecka, E., Kraśniewski, A., Marciniak, Z. (2012). *Krajowe Ramy Kwalifikacji w szkolnictwie wyższym [National Qualifications Framework in higher education]*, in: Chłoń-Domińczak, A. (ed.), *Raport o stanie edukacji. Liczą się efekty uczenia się [Report on the state of education. Outcomes matter]*, Warszawa: Instytut Badań Edukacyjnych
- Dąbrowski, M., Wiśniewski, J. (2011), 'Translating Key Competences into the School Curriculum: lessons from the Polish experience', *European Journal of Education* 46 (3)
- Deij, A. (2010), 'The European Credit System for Vocational Education and Training, VET innovator or Lifelong Learning Taximeter?', in: Bridges, P. Finn, M. (eds.), *Making Sense of Credit and Qualification Frameworks in the United Kingdom*, Derby: UK Credit Forum, University of Derby

- Dębowski, H. (2012), 'Shaping VET qualifications', in: Luck, A. (ed.), *Poland. VET in Europe – Country Report*, Cedefop/Refernet Poland
- Dybaś, M. (2014), *Nieformalne uwarunkowania wdrażania systemu przenoszenia i akumulowania osiągnięć w kształceniu i szkoleniu zawodowym w Polsce [Non-formal conditions of implementation credit accumulation and transfer system in Polish VET]*, Kultura i Edukacja 4
- Eberhardt, Ch. (2013), *Implementing ECVET: crediting, recognition and transfer of learning outcomes between European target stipulations and national System conditions*, Federal Institute for Vocational Education and Training (BIBB), Bonn: Discussion Papers 146
- Ertl, H. (2002), 'The concept of modularisation in vocational education and training: the debate in Germany and its implications', *Oxford Review of Education* 28(1): 53–73
- European Commission (2012), Using ECVET for Geographical Mobility. Part II of the ECVET Users' Guide, [http://www.ECVET-team.eu/sites/default/files/ECVET\\_qna\\_web\\_21\\_04\\_2010\\_1.pdf](http://www.ECVET-team.eu/sites/default/files/ECVET_qna_web_21_04_2010_1.pdf)
- European Commission (2014), 'Note to the members of the ECVET users group: The first evaluation of ECVET and its follow up Brussels', Annex to the invitation letter of 14.4.2014
- European Parliament and Council of the European Communities (2008), 'Recommendation of the European Parliament and of the Council of 23 April on the establishment of European Qualifications Framework for lifelong learning', *Official Journal of the European Union* (2008/C, 111/01)
- European Parliament and Council of the European Communities (2008), 'Recommendation of the European Parliament and of the Council of 18 June on the establishment of European Credit System for Vocational Education and Training (ECVET)' *Official Journal of the European Union* (2009/C, 155/02)
- Fietz, G., Reglin, T., Le Mouillour, I. (2008), *Implementing and developing a Credit System for Vocational Education and Training*, ECVET Reflector, Bonn: Bundesinstitut für Berufsbildung
- GHK Consulting (2012), *We have tried ECVET: Lessons from the first generation of ECVET pilot projects. Synthesis of results and project portraits*, [http://www.ecvet-projects.eu/Documents/Seminars/ECVET\\_Brochure\\_singlepages\\_allthesame.pdf](http://www.ecvet-projects.eu/Documents/Seminars/ECVET_Brochure_singlepages_allthesame.pdf)
- Hart, J., Howieson, C. (2004), *Unitisation: benefits and issues*, Glasgow: Scottish Qualifications Authority
- Jeruszka, U. (ed.) (2012), *Unowocześnianie metod i form kształcenia zawodowego w Polsce. [Modernising methods and vocational training form in Poland]*, Institute of Labour and Social Studies, Warsaw.

- Kabaj, M. (2010), *System kształcenia zawodowego i kierunki jego doskonalenia w warunkach integracji i wzrostu konkurencyjności: Diagnoza i elementy programu szerszego wdrożenia dualnego systemu kształcenia w Polsce [VET system and the possible directions of its development taking into account increasing integration and competitiveness: Diagnosis and elements of a program for implementing a dual system in Poland]*, Warszawa: Związek Rzemiosła Polskiego
- Kabaj, M. (2012). *Wpływ systemów kształcenia zawodowego na zatrudnienie i bezrobocie młodzieży: Projekt programu wdrożenia dualnego systemu kształcenia zawodowego w Polsce [The impact of VET systems on the employment and unemployment of youth: A proposed programme for implementing a dual system in Poland's VET]*, Warszawa: Instytut Pracy i Spraw Socjalnych
- Kraśniewski, A., (2012), 'Development of the National Qualifications Framework for Higher Education in Poland', *Journal of the European Higher Education Area 1*
- Kurek, S., Rachwał, T. (2012), 'Vocational Education and Training in Poland During Economic Transition', in: Pilz, M. (ed.), *The future of vocational education and training in a changing world*, Wiesbaden: Springer VS: 321–340
- Kwiatkowski, S.M., (2000a), *Zmiany strukturalne w kształceniu zawodowym w latach 1990–2000; Rynek pracy w latach 2000–2010 – prognozy [Structural changes in VET 1990–2000; Labour market 2000–2010 – prognosis]*, Warszawa: Instytut Badań Edukacyjnych
- Kwiatkowski, S.M. (ed.), (2000b). *Kształcenie zawodowe – rynek pracy – pracodawcy [Vocational training – labour market – employers]*, Warszawa: Instytut Badań Edukacyjnych
- Le Mouillour, I. (2005), *European approaches to credit (transfer) systems in VET*, Luxembourg: Office for Official Publications of the European Communities, Cedefop Dossier series 12
- Le Mouillour, I. (2012), 'Potentials for Change in Education and Training through Interaction between Credit Systems and Qualifications Frameworks', in: Pilz, M. (ed.), *The future of vocational education and training in a changing world*, Wiesbaden: Springer VS: 321–340
- Mehaut, P., Winch, C. (2011), 'EU Initiatives in Cross-National Recognition of Skills and Qualifications', in: Brockmann, M., Clarke, L. and Winch, C. (eds.), *Knowledge, Skills and Competence in the European Labour Market. What's in a vocational qualification?* Abingdon–New York: Routledge
- Ministerstwo Edukacji Narodowej [Ministry of National Education] (2015), *Założenia do projektu ustawy o zintegrowanym systemie kwalifikacji*. Dokument przyjęty przez Radę Ministrów 31 marca 2015 roku. [Premises of the legal act on integrated qualifications system. Document adopted by the Council of Ministries on 31<sup>st</sup> of March 2015], Warszawa: Ministerstwo Edukacji Narodowej
- Osiecka-Chojnacka, J. (2007), 'Szkolnictwo zawodowe wobec problemów rynku pracy' ['VET and the problems of the labor market'], in: Karpowicz, E. (ed.), *Rynek pracy [Labor market]* 3, Warszawa: Biuro Analiz Sejmowych: 67–96

- Parks, D. (ed.) (1998), *A Cross Country Analysis of Curricular Reform in Vocational Education and Training in Central and Eastern Europe. Integration of Work and Learning. Report*, Turin: European Training Foundation
- Pilz, M. (2002), 'The contrast between modular and occupational approaches to modernising vocational training', *Vocational Training: European Journal* 25: 27–33
- PPMI (2014), *Implementation of the Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET)*, Luxembourg: Publications Office of the European Union
- Puhani, P.A. (2000), *On the identification of relative wage rigidity dynamics: a proposal for a methodology on cross-section data and empirical evidence for Poland in transition*, No 2000–11, IRISS Working Paper Series, IRISS at CEPS/INSTEAD, <http://EconPapers.repec.org/RePEc:irs:iriswp:2000-11>
- Roszkowska, S., Majchrowska, A.K. (2014), *Premia z wykształcenia i doświadczenia zawodowego według płci w Polsce [Differentiation by sex in the premium attained through educational status and work experience in Poland]*, Warszawa: Narodowy Bank Polski, Departament Edukacji i Wydawnictw
- Rutkowski, J. (1996), 'Changes in the Wage Structure during Economic Transition in Central and Eastern Europe', *World Bank Technical Paper* 340, Washington, DC.: World Bank
- Rutkowski, J. (2001), *Earnings Inequality in Transition Economies of Central Europe: Trends and Patterns During the 1990s. Social Protection Discussion Paper 0117* World Bank, Washington, DC
- Shaw, G. (1995), 'Modernising Curricula in Vocational Education and Training in Poland: A Case Study', *European Journal of Education* 30(3) September: 265–275
- Sławiński, S., Dębowski, H. (eds.), *Referencing Report. Referencing the Polish Qualifications Framework for lifelong learning to the European Qualifications Framework*, Warsaw: Educational Research Institute
- Stanwick, J. (2009), 'Modularization and Modular Delivery of TVET', in: Maclean, R., Wilson, D. (eds.), *International Handbook of Education for the Changing World of Work. Bridging Academic and Vocational Learning*: Springer
- Stęchły, W., Dębowski, H., Lewicki, J., (2013), *Koncepcja systemu akumulowania i przenoszenia osiągnięć w zintegrowanym systemie kwalifikacji [Credit Accumulation and Transfer System in the Integrated Qualifications System]*, Warszawa: Instytut Badań Edukacyjnych
- Stęchły, W., Tomaszuk, A., Ziewiec, G. (2013), 'Modernizacja kształcenia zawodowego w świetle celów polityki uczenia się przez całe życie' ['Modernizing VET and the goals of lifelong learning policy'], in: A. Chłoń-Domińczak (ed.), *Raport o stanie edukacji. Liczą się efekty uczenia się [Report on the state of education. Outcomes matter]*, Warszawa: Instytut Badań Edukacyjnych

---

Ziewiec, G. (ed.), Tomaszuk A., Pierwieniecka R., Stęchły W. (2015), *Propozycja metody określania poziomu kwalifikacji: Rezultaty współpracy z konsultacyjnymi zespołami branżowymi marzec 2012 – wrzesień 2013 [Proposition of a method for levelling qualifications: Results of work with sectoral consultations groups, March 2012 – September 2013]*, Warszawa: Instytut Badań Edukacyjnych