



FILLING THE GAP

Defining a Robust Quality Assurance Model for Work-Based Learning in Higher Education

Prepared by the ENQA and Groningen WEXHE teams

Brussels and Groningen, 2020



Co-funded by the
Erasmus+ Programme
of the European Union

PROJECT PARTNERS



This publication is a result of the project that is funded by the European Commission's Erasmus+ programme, Key Action 2, Knowledge Alliance Projects (Grant agreement: 575683-EPP-1-2016-1-NL-EPPKA2-KA). The views expressed in this publication are the sole responsibility of the author(s), and can in no way be taken to reflect the views of the European Commission.

FILLING THE GAP

Defining a Robust Quality Assurance Model for Work-Based Learning in Higher Education

Anaïs Gourdin, Milja Homan and Robert Wagenaar¹

Introduction

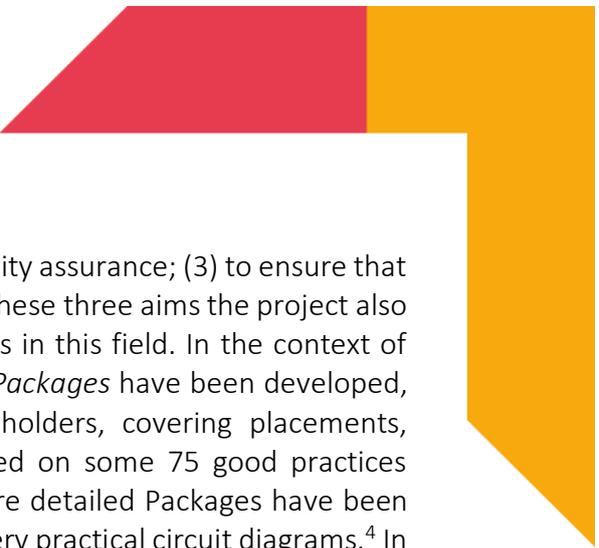
It is now widely accepted that higher education (HE) programmes should not only meet internationally agreed quality standards, but also be of relevance to meet the needs of society. During the last two decades the notion has been developed that graduates should not only be knowledgeable but also skilled. As a result, the development of generic competences or transferable skills has been emphasised, alongside subject specific knowledge and skills. It has been gradually understood that this notion requires a change of paradigm regarding the learning process. In the setting of the Bologna Process it is stressed that degree programmes should no longer be expert-driven, but should be student-centred, promoting active learning. This implies that knowledge transfer and acquisition need to be supplemented with their application in practice, which requires an extended toolbox of learning, teaching and assessment strategies and methods. As a result, learning is now expressed in learning outcomes statements, for which the following definition is applied. They specify what students will know, be able to do and/or be able to demonstrate when they have completed or participated in a course unit or programme. The outcomes should be observable, measurable and allow for demonstration.

Outcome-based learning is also perceived as conditional for bridging the identified skills gap of what is learned and what is required to operate successfully in the workplace and in society at large. Knowledge and skills can be practiced in the setting of a HE environment, by offering designated assignments. The ultimate test whether students apply what has been learned and take responsibility for their actions, showing autonomy, is in the workplace. Although work-based learning (WBL) has become an integral component in a growing number of degree programmes there is still hesitation or even outright opposition among academics. The arguments challenging WBL range from it not being academic to insufficiently quality controlled.

To overcome opposition against and to facilitate WBL the Erasmus+ Knowledge Alliance project *Integrating Entrepreneurship and Work Experience in Higher Education* was launched in January 2017.² The project has now finished and is able to offer its results. It combined the expertise of four HE institutions with the expertise of the employability field as well as the European Association of Institutions in Higher Education (EURASHE) and the European Association for Quality Assurance in Higher Education (ENQA). It defined as its three main objectives: (1) to increase the capacity and competences of staff in universities and enterprises to provide high quality work experience and entrepreneurship; (2) to support the accreditation

¹ Anaïs Gourdin is Project Manager at ENQA; Milja Homan is Project Officer at ENQA; Robert Wagenaar is Professor in History and Politics of Higher Education and Director of the International Tuning Academy at the University of Groningen

² WEXHE Project website: <https://wexhe.eu>



of all kinds of work experience through ECTS and effective quality assurance; (3) to ensure that the skills needs of employers are understood. On the basis of these three aims the project also reviewed existing policy development to support further ones in this field. In the context of this project, nine comprehensive information and guidelines *Packages* have been developed, with each of them focusing on different groups of stakeholders, covering placements, traineeships and entrepreneurs.³ The Packages are based on some 75 good practices which have been collected from seven EU countries. The more detailed Packages have been transformed into three easy to use brochures which contain very practical circuit diagrams.⁴ In each of the Packages extensive attention is paid to the quality assurance aspects of WBL.

This paper, which is one of the outcomes of the project, focusses on the recognition and quality assurance mechanisms related to modes of WBL, in particular placements. When discussing quality assurance, *process* and *content* related aspects should be distinguished. *Content* – development of subject specific and generic competences - can be phrased in terms of whether the evidence – the intended level of learning - is actually offered. A well-defined *process* for quality enhancement and assurance is perceived as a requirement to build trust and confidence. It checks whether the conditions for learning are up to standard. Both - conditions and level of learning – are key ingredients for recognition. An inventory made by ENQA at the beginning of 2018, shows that very limited work has been done by Quality Assurance Agencies so far to assure the quality of WBL. For this paper the work established by the UK Quality Assurance Agency (QAA) and Agency for the Quality of the Basque University System (Unibasq) has been analysed. This work has been aligned with an analysis of the applicability of the *European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)* and the insights offered by the WEXHE project. The paper answers the question which elements are thought necessary to build a robust and reliable quality assurance model for WBL.

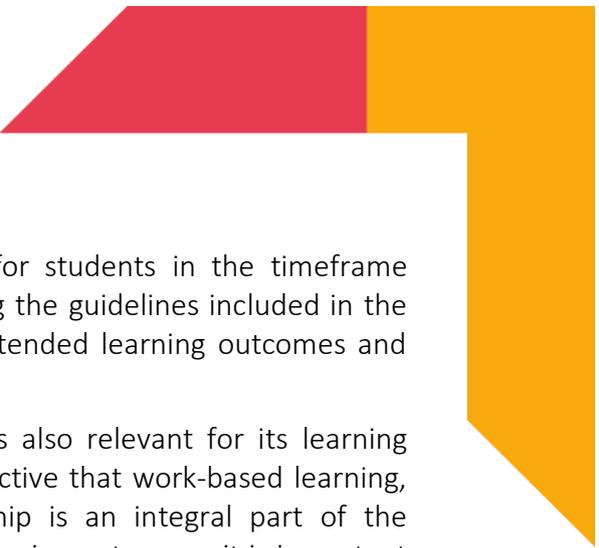
Outcomes of the learning process and related student workload

As said, when quality assurance is discussed, a distinction is made between process and content. In terms of process, a quality culture is expected to be in place which guarantees systematic attention offered to the way study programmes are organised and implemented. In other words, the organisation is in control regarding the quality of its products. A second element – the content - is to guarantee the quality of individual degree programmes, that is to say meeting well-defined standards or at least respecting internationally agreed reference points, e.g. what makes a history or a physics programme a high-quality degree, etc. To assure this is the case, it is required to define realistic programme learning outcomes to be met at graduation. An important indicator that the required level of learning is respected, is aligning the programme learning outcomes to the descriptors defined by European overarching qualifications frameworks, national qualifications frameworks and if available subject area specific qualifications reference frameworks, such as have been developed in the context of the European Commission supported Tuning-CALOHEE (Measuring and Comparing Achievements of Learning Outcomes in Higher Education in Europe) project.⁵ Realistic learning

³ WEXHE, Work Placement Package. Prepared by Prof. Ivan Svetlik, University of Ljubljana, Ljubljana, 2020.

⁴ WEXHE, Work Placement Package. Summary Report. Prepared by Hacer Tanelli, UIIN, Amsterdam, 2020.

⁵ CALOHEE Website: <https://www.calohee.eu>



outcomes mean that the programme should be feasible for students in the timeframe scheduled, which implies that these outcomes are respecting the guidelines included in the ECTS Users' Guide. ECTS defines learning on the basis of intended learning outcomes and student-workload.⁶

What is of importance for complete degree programmes is also relevant for its learning components, such as work-based learning. Taken the perspective that work-based learning, e.g. a work placement, traineeship and/or entrepreneurship is an integral part of the programme and therefore contributing to the programme learning outcomes, it is important that measurable learning outcomes are defined for the work-based component in a degree programme. This means that there is a need – according to the ECTS guidelines – to be clear about what is intended to be learned in what timeframe. Well documented experience shows that more complex and ambitious learning outcomes require more time to be achieved. Work-based learning implies developing practice on the basis of both subject specific and generic competences. The WEXHE project has showed us that for employers in particular the generic competences are of key importance. These competences might be slightly varying between employment sectors as the WEXHE Work Packages show us. The contribution of work-based learning is that what has been learned in an academic environment, is applied and further developed in the workplace or a related format. This implies that the focus is on the application of skills and wider competences, that is to operate autonomously and to take responsibility.

In the context of WEXHE, generic competences tables have been developed, which are based on the model developed by CALOHEE. The model is founded on a merger of the Qualifications Framework for the European Higher Education Area and the European Qualifications Framework for Lifelong Learning. It has been documented in several academic publications.⁷ The key competences identified, result from the inventory and description of all cases made in the WEXHE project. For each of the generic competences – following the CALOHEE model - three progression levels of learning are defined for each of the cycles, bachelor and master.

The model can be illustrated by offering an example, related to a first cycle programme: *problem solving and decision making*. This example shows that for every competence there is a body of knowledge, its mastery and its application in practice. Each of these levels require time to develop and achieve.

⁶ ECTS Users' Guide 2015: https://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide_en.pdf

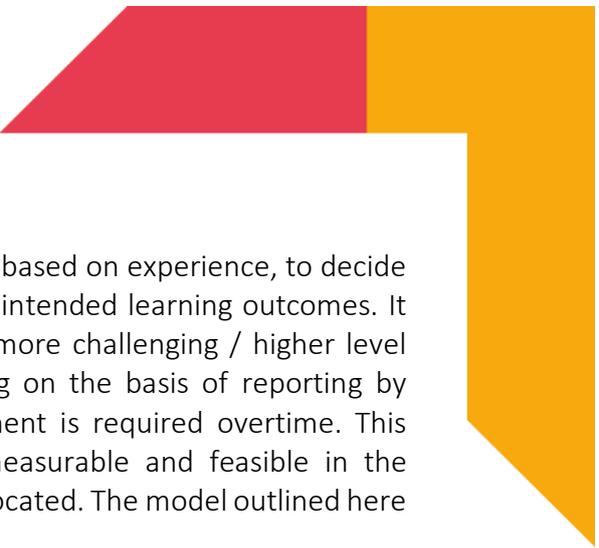
⁷ Robert Wagenaar, *Reform! TUNING the Modernisation Process of Higher Education in Europe. A Blueprint for Student-Centred Learning*. Bilbao and Groningen, 2019, 506 pp.; Robert Wagenaar, ed., *Tuning-CALOHEE Assessment Reference Frameworks for Civil Engineering, Teacher Education, History, Nursing, Physics*, Groningen, 2018. 165 pp.; Robert Wagenaar, What do we know – What should we know? Measuring and comparing achievements of learning in European Higher Education: initiating the new CALOHEE approach, in: Olga Zlatkin-Troitschanskaia, Miriam Toepper, Hans Anand Pant, Corinna Lautenbach and Christine Kuhn, eds. *Assessment of Learning Outcomes in Higher Education. Cross-National Comparisons and Perspectives*. Cham: Springer International Publishing, 2018, pp. 169-189.

<i>QF EHEA descriptors</i>	<i>EQF/SQF dimensions</i> <i>Competence</i>	<i>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</i>	<i>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</i>	<i>Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts.</i> <i>Take responsibility for managing professional development of individuals and groups.</i>
II - Apply knowledge and understanding	Problem solving and decision making	Establish methods of analysis / solution of problems from the professional field by linking concepts with basic strategies, procedures and tools. Demonstrate awareness of the key aspects of professional, ethical and social responsibilities linked to management of activities in the professional area, decision making and judgement formulation.	Analyse a complex problem, recognise its structure, devise, execute and validate a plan for its solution in the professional field. Manage work context in the subject area, take decisions and formulate judgements.	Identify appropriate concepts, methods of analysis/ solution of complex problems in the professional field. Identify appropriate and relevant approaches to manage work contexts in the subject area and reflect on professional, ethical and social responsibilities in taking decisions and formulating judgements.

It is obvious from the example that the highest level of learning is defined in the last column. It underpins the relevance of work-based learning.

An articulated model of work-based learning requires that for the learning type – work placement, traineeships and entrepreneurships - sets of learning outcomes are defined and agreed. Although, it is strongly advised to include those competences which have been identified by stakeholders, in particular employers, as core ones, it is up to an individual programme to make the selection. The selection should also include the intended level to be achieved. To this end the WEXHE tables have been developed, because they offer a menu from which a motivated choice can be made. The learning outcomes identified have to be part of a contractual arrangement between the partners involved including the student. They should be in accordance with the activities foreseen. In other words, it should be very clear from the outset that the learning outcomes allow for deciding the level of achievement. This implies they are observable, measurable and allow for demonstration.

As for any learning component or unit also in the case of work-based learning the achievement of the set of learning outcomes defined, should be feasible in the timeframe set. From the perspective of fairness as well as quality assurance, this timeframe should not be left open. It is up to those responsible to decide how much space can be devoted to a work-based learning component in a particular degree programme. Experience - built up over decades - has taught us that for example a work placement should last in a full-time mode 10, 15 or 20 weeks to have added value to the programme and the student. In terms of hours that is 400 to 800 working hours. Taking that 1 ECTS credit reflects 25 – 30 hours, this implies approximately 15 to 30 ECTS credits. A fixed timeframe decides the set of learning outcomes. Students might opt for a longer work placement period, but that should not impact the number of credits allocated



in the programme. Therefore, it requires precise calculations, based on experience, to decide what can be expected from a typical learner in terms of the intended learning outcomes. It should be obvious that a longer period allows for covering more challenging / higher level learning outcomes. Experience again, shows that fine-tuning on the basis of reporting by students and providers of the work-based learning component is required overtime. This process results in sets of learning outcomes which are measurable and feasible in the timeframe decided and respect the number of ECTS credits allocated. The model outlined here allows for applying the agreed rules for quality assurance.

European Standards and Guidelines

The ESG provide the overarching framework for internal and external quality assurance (QA) in HE enabling assurance and improvement of quality of HE and mutual trust. The ESG were adopted by the Ministerial conference of the Bologna Process in 2005 following a proposal prepared by ENQA in co-operation with EURASHE, the European Students' Union (ESU), and the European University Association (EUA). As considerable progress had been made since 2005 in QA as well as in other Bologna Process action lines (such as the qualifications frameworks, recognition and the promotion of the use of learning outcomes), in 2012 the Ministerial Communiqué invited the stakeholder organisations (this time including also Education International, representing teachers, BUSINESSEUROPE representing employers, and the European Quality Assurance Register (EQAR)) to prepare a proposal for a revised version of the ESG to improve their applicability and usefulness. The revised version of the ESG was adopted in 2015⁸.

The ESG are composed of three parts addressing internal quality assurance, external quality assurance, and the quality assurance of the QA agencies in HE and they apply to all HE offered in the European Higher Education Area (EHEA) regardless of the mode of study or place of delivery. This means that the ESG cover the WBL provision as well although not specifically.

Within the framework of the WEXHE project, ENQA has looked into ways on how to assess and guarantee the quality of WBL and integrate those elements in the Packages being developed in the project. It had to note that not many agencies have systematic approaches to address the QA of WBL. Only some agencies have opted for creating specific criteria or methods to address this form of delivery. This paper, based on an analysis of the work of the QAA UK and Unibasq, respectively the QAA Quality code for Higher Education⁹ and the Unibasq Protocol for recognition of dual learning for official Bachelor's and Master's degrees¹⁰, presents a mapping exercise of the ESG Part I (internal quality assurance) focussing on the process aspects of quality assurance also taking the content aspects into account.

⁸ European Association for Quality Assurance in Higher Education: Standards and Guidelines for Quality assurance in Higher Education: <https://enqa.eu/index.php/home/esg/> (accessed in April 2019)

⁹ QAA, Quality code, April 2019, (English): <https://www.qaa.ac.uk/quality-code/>

¹⁰ Unibasq, Protocolo para la obtención del reconocimiento de formación dual para títulos universitarios oficiales de grado y máster, April 2019 (Spanish): https://www.unibasq.eus/wp-content/uploads/2017/11/Protocolo_DUAL_Unibasq_CA_09_10_2017.pdf

Applicability and relevance of the ESG Part I to work-based learning

Although it is well understood that the ESG apply to all modes of teaching and learning, no matter their place of delivery, the way in which they could be interpreted in the WBL context is sometimes less clear. In the setting of the WEXHE project, ENQA examined the applicability and relevance of the ESG Part I (internal quality assurance) providing special guidance (e.g. elements to be considered) on how they could be applied where programmes involving WBL are concerned. In general, as it is the case with the ESG, all elements mentioned below need to be considered in conjunction with other contextual requirements such as institutions' regulations, funding body requirements and professional, statutory and regulatory bodies' rules and regulations as well as relevant national qualifications framework and sector-recognised standards. In the analysis the numbering of the ESG Part I is followed. This paper concentrates on the first three standards, which can be perceived as the most crucial ones in the setting of WBL, although the others are very much of relevance as well.

1.1. Policy for quality assurance

Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.

As it is stated in the ESG 2015 in the Guidelines of the Standard 1.1 *"The quality assurance policy also covers any elements of an institution's activities that are subcontracted to or carried out by other parties"*. This means that a strategy of WBL or elements of WBL should be included in the overall institutional strategy and in the general policy for quality assurance of the institution and that the responsibility of all parties in terms of quality assurance in this context should be defined.

Institutional policies for WBL may contain the constituting elements of quality, which include among others:

- institution and employer support
- design and planning of the WBL degree or course
- WBL degree or course structure
- teaching and learning
- student support
- identification of needs and expectations
- employer's infrastructures
- student assessment and certification
- monitoring and measurement of satisfaction
- improvement

The institution may also define policies to grant proper access and ensure participation in WBL for those students affected by disability, illness, and other mitigating circumstances.

As WBL involves partnerships, there should thus be a policy on formalised agreements between the different parties indicating which features they should include. These agreements, which are developed prior to the WBL opportunity should be supportive so that all stakeholders are aware of their own and others' roles and responsibilities. They may include elements such as:

- what is expected of students
- statutory requirements: health and safety, and safeguarding at the workplace
- clear and transparent roles, responsibilities and expectations of the education organisation, the employer and the student (and the relationships between them)
- how specific issues, such as sharing of data, are dealt with
- contingency procedures to deal with premature termination of WBL including possible options for students to continue studying, either at the same or an alternative institution.

1.2. Design and approval of programmes

Institutions should have processes for the design and approval of their programmes. The programmes should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

Prior to developing a WBL programme or course, it is necessary to evaluate the interest and relevance of the WBL approach for the acquisition of some of the competences of the whole degree for example.

WBL should be integral to the course of study and should be designed in partnership between the different parties involved, which means that it should include employers in addition to institutions and students (and other stakeholders as required such as, care users, professional bodies and regulatory authorities). The partnership role between employer and institution is important in defining the content and delivery of the work-based modules, and in designing the work-based assessments as well as in the daily management of the programme or course (performing the assessment itself and intensive tutoring of students). The employer is indeed an active agent in the programme/course in general and more specifically in the teaching-learning activities. It could be interesting to create a mixed commission with representatives of the institution and the workplace to guarantee the coordination and integration of the activities developed in both places (workplace and classroom).

When developing the programme or course unit, the different parties should decide which activities will be performed in the classroom and which in the workplace, as well as their

duration, schedule, evaluation criteria, learning outcomes and the temporality with which they are going to be alternated (e.g. alternate semester, weeks, days or hours in the classroom and in the workplace).

In the case of WBL, the learning outcomes that are part of the programme/course design, should be directly relevant to work objectives to ensure integration and an effective experience. WBL should ensure that students have opportunities to apply and integrate areas of professional knowledge, skills and professional behaviours to meet programme/course learning outcomes for an identified job role and/or broader employment.

It should also be clear which competences will be developed in the workplace and which ones in the classroom and how they will be developed (general competences or specific competences). If a competence is developed in both places, the different level of development or way of acquiring it in each one of the places should be indicated. It should be demonstrated in any case that the design and implementation of the degree coordinates and integrates classroom activities with those carried out in the workplace. This also means that the credits acquired within the workplace must be combined with those acquired in the classroom.

The WBL programmes should be designed in a flexible way, in order to enable all students to benefit from WBL opportunities, including those with special educational needs and disabilities. Furthermore, students should previously take the necessary training to ensure the development of the WBL provision in the workplace safely and effectively.

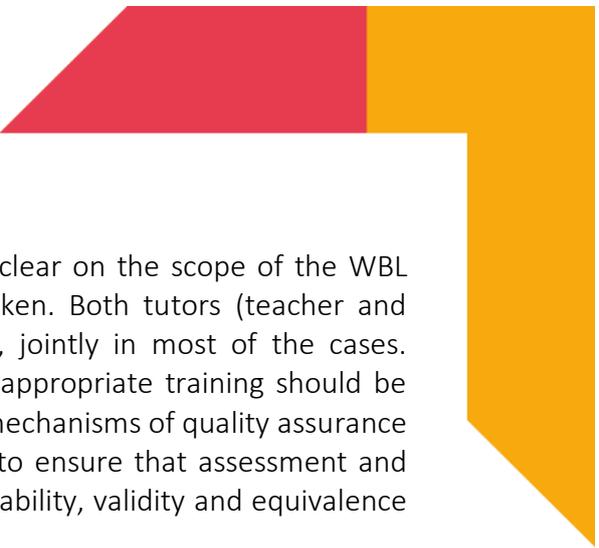
For certain types of WBL, such as placements, the course aims are designed to meet the learning needs of the student as an employee, and the aims of the employer organisation. And they should be designed with milestones in place to enable progress to be monitored (skills, learning behaviour, development).

To define relevant learning results from WBL, as outlined earlier, WEXHE has established a list of key generic competences for each of the types of WBL identified. The ones for placements are the following: Communication, social relations and negotiation; Team work and networking; Problem solving and decision making; Initiating creative and / or innovative ideas; Independent learning and working, capacity and enthusiasm to learn; Entrepreneurship and leadership; IT skills. As stipulated, for each of these competences three levels of mastery have been defined in terms of descriptors for both bachelor and master level. The tables resulting, offer an excellent basis for selecting the WBL learning outcomes for individual learners, taking into account their subject area and type of HE education.

1.3. Student-centred learning, teaching and assessment

Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

Institutions should ensure flexible learning paths that enable all students to benefit from WBL opportunities, including those with special educational needs and disabilities.



Education organisations, employers and students should be clear on the scope of the WBL tasks and the methods of assessment that will be undertaken. Both tutors (teacher and employer) should participate in the evaluation of students, jointly in most of the cases. Furthermore, where employers are involved in assessment, appropriate training should be given and their role should be clearly defined, and the usual mechanisms of quality assurance should be used. This is also a way, among other processes, to ensure that assessment and corresponding awards in WBL opportunity have the same reliability, validity and equivalence for students than in other workplaces or at the institution.

Stakeholders should be engaged in the development, assurance and enhancement of the quality of their educational experience, which means that students, employers and others involved in WBL can and should contribute to course design and development, and ongoing monitoring and evaluation.

There should be fair and transparent procedures for handling complaints and appeals which are accessible to all students and guidance should be given to students on when and how the relevant process(es) can be accessed and which party they should address. Students should however have an ultimate right of complaint to the institution who is the primary responsible for providing high-quality to the students.

WBL should ensure that students have opportunities to apply and integrate areas of professional knowledge, skills and professional behaviours to meet course learning outcomes for an identified job role and/or broader employment. All students should be able to benefit from an authentic and learning-rich environment and be allowed to complete relevant tasks (sometimes under supervision) that support the achievement of learning outcomes. However, some students may need guidance on how to achieve this, therefore, student-centred approaches should be directive to enable students to take responsibility and benefit from opportunities that are aligned to the employment. Students could for example benefit from training before the WBL experience to ensure the development of the WBL provision in the workplace effectively and safely.

Conclusion

The key principles of quality assurance are applied to all modes of delivery or provision of HE thus including WBL. However, the specificities of WBL should be taken into consideration and some elements should particularly be highlighted. This applies to the involvement of employers in the various steps of the design and delivery as they are directly dealing with students and are responsible for the quality of the training they are delivering to them, providing altogether a safe and affable environment. Emphasis should also be given to the accessibility and equity in the WBL, meaning that all students should have the opportunity to be involved in WBL and that they should have the same recognition and validation as those studying more traditional modes of delivery. This also means that whenever it is necessary, students should be given initial training to feel as comfortable as possible in the workplace environment.

In the HE landscape, not many QA agencies have systematic approaches to address the QA of WBL specifically. The WEXHE partners have taken up the challenge to fill the existing gap, extracting elements on the topic from the work already performed by some experienced QA agencies and combining these with the findings of the project. This in order to provide, as an



integral part of the information and guidelines Packages, a set of tools as complete as possible to stakeholders. By identifying a list of key generic competences which can be developed best in the context of WBL and by defining three levels of descriptors, WEXHE offers in addition a reference of what can be learned as a result of WBL in a well-defined timeframe, respecting the ECTS guidelines regarding student-workload. In conclusion, this offers main stakeholders – HE institutions and their staffs, WBL providers, students and quality assurance agencies and organisations a robust quality assurance instrument covering both content and process. A product which deserves to be widely distributed in the interest of all involved.

References

CALOHEE Project Website: <https://www.calohee.eu>

Considerations for quality assurance of e-learning provision: <https://enqa.eu/indirme/papers-and-reports/occasional-papers/Considerations%20for%20QA%20of%20e-learning%20provision.pdf>

ECTS Users' Guide 2015: https://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide_en.pdf

QAA Quality code for higher education: <https://www.qaa.ac.uk/quality-code/>

<https://www.qaa.ac.uk/en/quality-code/advice-and-guidance/work-based-learning>

<https://www.qaa.ac.uk/en/quality-code/advice-and-guidance/external-expertise>

<https://www.qaa.ac.uk/en/quality-code/advice-and-guidance/partnerships>

The Standards and Guidelines for Quality Assurance in the European Higher Education Area: https://enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf

Unibasq Protocol for recognition of dual learning for official Bachelor's and Master's degrees: https://www.unibasq.eus/wp-content/uploads/2017/11/Protocolo_DUAL_Unibasq_CA_09_10_2017.pdf

Wagenaar, Robert, *Reform! TUNING the Modernisation Process of Higher Education in Europe. A Blueprint for Student-Centred Learning*. Bilbao and Groningen, 2019, 506 pp.

Wagenaar, Robert, ed., *Tuning-CALOHEE Assessment Reference Frameworks for Civil Engineering, Teacher Education, History, Nursing, Physics*. Groningen, 2018. 165 pp.

Wagenaar, Robert, What do we know – What should we know? Measuring and comparing achievements of learning in European Higher Education: initiating the new CALOHEE approach, in: Olga Zlatkin-Troitschanskaia, Miriam Toepper, Hans Anand Pant, Corinna Lautenbach and Christine Kuhn, eds. *Assessment of Learning Outcomes in Higher Education. Cross-National Comparisons and Perspectives*. Cham: Springer International Publishing, 2018, pp. 169-189.

WEXHE, Work Placement Package. Prepared by prof. Ivan Svetlik, University of Ljubljana, Ljubljana, 2019.

WEXHE, Work Placement Package. Summary Report. Prepared by Hacer Tanelli, UIIN, Amsterdam, 2019.

WEXHE Project Website: <https://wexhe.eu>