



Methodological framework for Work-based Learning in higher education of Armenia and Russia

Under FlexWBL

Project acronym	FlexWBL
Project full title	Development of a flexible, innovative and practical framework for Work-based Learning in higher education of Armenia and Russia
Project number	610072-EPP-1-2019-1-LV-EPPKA2-CBHE-JP
Funding scheme	ERASMUS+, CBHE
Project start date	November 15, 2019
Project duration	36 months (15.11.2019 – 14.11.2022)

Title of document:	Methodological framework on implementing WBL in HE
Work package	WP2.1 Development of WBL framework and a set of implementation
Deliverable	WP2.1 Methodological framework on implementing WBL in HE
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Due date	
File name	
Number of pages	30
Dissemination level	Public

Abstract	<p>The document describes a methodological framework for Work-based Learning in higher education within the boundaries of implementation of the project “610072-EPP-1-2019-1-LV-EPPKA2-CBHE-JP FlexWBL: Development of a flexible, innovative and practical framework for Work-based Learning in higher education of Armenia and Russia”. It provides a description of a procedure for methodological framework concept generation in the context of solution of the primary project tasks. The report represents a description of documents that correspond to the primary goal of methodological framework development – developing a methodological WBL implementation basis in national higher education systems of Armenia and Russia as a condition for closing the gap between the graduate training quality and the needs of the labour market. There are covered formats and contents of the sections of Concept methodological framework for Work-based Learning in higher education of Armenia and Russia that should be studied under the scope of the project and tried and tested.</p>
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VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision description	Partner responsible
1	21.04.2021	Draft version	P2.1 (TvSU)

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Abbreviation List

EP = Educational Program

FSES = Federal State Educational Standard

WBL = Work-based Learning

HE = Higher Education

HEI = Higher Education Institution

PEP = Principal Educational Program

GQW = Graduate Qualification Work



Abstract

The document describes a methodological framework for Work-based Learning in higher education (HE) within the boundaries of implementation of the project “610072-EPP-1-2019-1-LV-EPPKA2-CBHE-JP FlexWBL: Development of a flexible, innovative and practical framework for Work-based Learning in higher education of Armenia and Russia”. It provides a description of a procedure for methodological framework concept generation in the context of solution of the primary project tasks. The report represents a description of documents that correspond to the primary goal of methodological framework development – developing a methodological basis for WBL implementation in national higher education (HE) systems of Armenia and Russia as a condition for closing the gap between the graduate training quality and the needs of the labour market. There are covered formats and contents of the sections of Concept methodological framework for Work-based Learning in HE of Armenia and Russia that should be studied under the scope of the project and tried and tested.

Core Tasks

The project is carried out within the framework of Erasmus+ Capacity Building in Higher Education Competition 2019/Key Action 2/ in accordance with the agreed national priorities of Armenia and Russia: raising higher education across the general population/university-enterprise collaboration, business activity and graduate employability.

The research topics being implemented within the framework of the project in accordance with the grant proposal:

- New innovative curricula/training methods/development of training courses.
- Quality and relevance of HE in partner countries.
- Collaboration of educational institutions and business activity.

General goals and tasks for the current project type:

- Support of partner countries in the context of solving the problems encountered in their higher educational institutions (HEI) and systems including issues of quality, actuality, equality of access, planning, providing service, and management.
- Contribution to collaboration of EU and partner countries (and among the countries).

To be achieved by means of:

- Improvement in HE quality and mainstreaming HE for the labour market and society.
- Capacity building and skill improvement in HEIs by means of development of new and innovative educational programs (EP).
- Enhancing relationship between HEIs and the external economic and social environment.

Specific project tasks:

- Creation of a platform for implementation of work-based learning (WBL) programs in national HE systems of Armenia and Russia in order to close the gap between the graduate skills and the requirements of the labour market by means of cooperation of universities and enterprises, and the wider economic environment, according to the Paris communique after 2020.
- Creation of a framework for WBL program development in national HE systems of Armenia and Russia coordinated with the best EU practices.
- Capacity development and increasing the capabilities in HE by means of gain in experience of development and implementation of training courses containing WBL elements.
- Launching WBL web-site and WBL teacher network.



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- Pilot launching the WBL framework in HE of Armenia and Russia.

The Concept methodological framework for Work-based Learning in HE of Armenia and Russia

For the purpose of scientific and theoretical substantiation of WBL program framework development and implementation in HE of Armenia and Russia, a concept represented in Table 1 was put forth.

Appendix 1. The Concept methodological framework for Work-based Learning in HE of Armenia and Russia was developed.

Section Title	Section Content
Primary goal of the methodological framework for Work-based Learning in HE	– developing a methodological basis for WBL implementation in national HE systems of Armenia and Russia as a condition for closing the gap between the graduate training quality and the needs of the labour market;
Target indicators of the methodological framework for Work-based Learning in HE	– number of EPs involving WBL; – a population training by EPs involving WBL; – number of trained WBL experts; – rise in the degree of satisfaction of students with the quality of EPs involving WBL.
WBL components in HE	The base WBL components in HE are represented in Table 2.
Principles of the methodological framework for Work-based Learning in HE	<ul style="list-style-type: none"> • flexibility; • innovation; • transdisciplinarity; • inclusivity; • resource spend optimization; • structured (organizational) capability; • self-determination; • training and support; • triad approach; • corporativity.
Model of methodological framework for Work-based Learning in HE	represents a concept-theoretical education reflecting the features of organization of a WBL-involving EP and processes: PLANNING – INTRODUCTION – IMPLEMENTATION – REFLECTION (ASSESSMENT).
Plan of implementation of the methodological framework for Work-based Learning in HE	
Infrastructure of the methodological framework for Work-based Learning in HE	
WBL EP resource development process	is represented based on a flexible WBL EP resource development maturity model.
Methodological toolkit for implementation of the	A three-level model of maturity of methodological toolkit development in EPs involving WBL.

methodological framework for Work- based Learning in HE	
Procedures for implementation of the methodological framework for Work- based Learning in HE	
Deliverables of implementation of the methodological framework for Work- based Learning in HE	<ol style="list-style-type: none"> 1) list of stakeholders; 2) benefits for each stakeholder group; 3) indicators of assessment of implementation of the methodological framework for Work-based Learning in HE.
Monitoring of implementation of the methodological framework for Work- based Learning in HE	<ul style="list-style-type: none"> – monitoring objects; – monitoring tasks; – monitoring results; – managerial decisions on monitoring results.

The objectives of development and implementation of the methodological framework for WBL programs in HE should be focused on achieving strategic goals in the educational system – achieving such indicators of education quality as satisfy the needs of all interested parties (graduates, the labour market, the government) as well as meet the requirements of national educational standards for HE (FSES for HE of Russia and Armenia).

WBL components in HE

During development of the methodological framework for Work-based Learning in national HE systems of Armenia and Russia, there were considered special aspects of the technologies identified in the course of analysis of global and Russian theories and practice. Table 2 presents the basic WBL components in HE.

Appendix 2. WBL components in HE

No	WBL components	Компоненты WBL
1	Partnership between students, HEI and employers to improve the quality of education and promote the career growth of students and graduates	Партнерство между обучающимися, вузом и работодателями с целью повышения качества образования и содействие карьерному росту студентов и выпускников
2	The combination of work and training in a real work environment	Сочетание работы и обучения в реальной производственной обстановке
3	Correspondence of an EP to the needs of the student and the organization in which he/she works	Соответствие образовательной программы потребностям обучающегося и той организации, в которой он осуществляет профессиональную деятельность
4	A student takes responsibility for his/her own lifelong learning and professional development	Принятие обучающимся на себя ответственности за собственное непрерывное обучение и развитие
5	Personal learning path and recognition of prior learning through the validation of informal and non-formal learning	Персональная траектория обучения и признание предшествующего опыта обучения посредством валидации неформального и спонтанного обучения
6	Study projects implemented directly at a workplace integrate knowledge from different disciplines and focus on improving the business processes of organization where the student works (the ability to replace part of a discipline, one discipline or several disciplines with a project at the workplace)	Образовательные проекты, реализуемые непосредственно на рабочем месте, интегрируют знания из разных отраслей науки и ориентируются на совершенствование бизнес-процессов организации (возможность замены части дисциплины, одной дисциплины или нескольких дисциплин проектом на рабочем месте)
7	A specific assessment of the learning outcomes is needed, including those that have been obtained previously, which allows for a recount through validation and to shorten the learning period and make the educational process more flexible and convenient for both the student and the employer	Специфическая оценка результатов обучения, в том числе предшествующих, позволяющая произвести перезачет посредством валидации и сократить срок обучения и сделать образовательный процесс более гибким и удобным как для обучающегося, так и для работодателя
8	Active use of ICT and distance learning technologies	Активное применение информационно-коммуникационных технологий и

		дистанционные технологии обучения
9	Network learning based on active involvement in the educational process of the resources of other universities and external educational platforms	Сетевое обучение, предполагающее активное вовлечение в образовательный процесс ресурсов других вузов и внешних образовательных платформ
10	Integration of various disciplines and areas of knowledge by transdisciplinary learning	Трансдисциплинарность обучения и интеграция различных дисциплин и областей знаний
11	The realism of an EP in terms of time, including the possibility of reducing or prolonging education	Реалистичность образовательной программы с точки зрения времени освоения, в том числе возможность сокращения или продления обучения
12	The possibility of a student being on campus depending on his visiting opportunities with the maximum number of consultations and the availability of training with full-time students	Возможность присутствия обучающегося в кампусе в зависимости от его возможностей посещения при максимальном количестве консультаций и доступности обучения со студентами очного обучения
13	Assessment of learning outcomes in credits, their accumulation and the possibility of transferring from a study programme to another one	Измерение результатов обучения в зачетных единицах, их накопление и возможность переноса с программы на программу
14	Flexible study timetable	Гибкий календарный график учебного процесса
15	Support for reflective practices and introspection, innovative pedagogical theories and practice	Поддержка рефлексивных практик и самоанализа, новые педагогические подходы
16	Innovation in training through the active involvement of employers and innovations in production	Инновационность обучения за счет активного вовлечения работодателей и новшеств на производстве
17	EP development based on the concept of value added to all interested parties (real work at the enterprise, relevance of acquired knowledge and skills for professional development and career growth)	Формирование образовательной программы на основе концепции добавленной стоимости (реальная работа на предприятии, актуальность приобретаемых знаний и умений)
18	Active support of the student by the employer	Активная поддержка обучающегося работодателем
19	The special role of the tutor as the person responsible for supporting the student during the implementation of his/her individual learning path.	Особая роль тьютора как лица ответственного за поддержку студента во время реализации им своей образовательной траектории
20	The need for teaching staff to constantly improve their skills in new pedagogical theories and practice, especially using ICT	Формирование у преподавателей вуза потребности постоянно повышать квалификацию в сфере новых образовательных технологий и ИКТ

Principles of the methodological framework for Work-based Learning in HE

The non-uniqueness of points of view in sciences society and in real practice regarding the issues concerning methods for implementation of WBL-technologies in national HE systems of Armenia and Russia sets a task of development such methods based on the guiding principle system. The principles of the methodological framework for Work-based Learning in HE are given in Table 3.

Appendix 3. Principles of the methodological framework for Work-based Learning in HE

Principles	Brief Characteristic
Flexibility principle	Creates conditions for continuous improvement of an educational process involving WBL in order to increase marketability of being implemented EPs and provide education quality as well as quality of incorporation of labour market needs. There are flexible EP approaches possible such as individual learning, distance learning, in-house training, integrated learning etc.
Innovation Principle	Provides for application of innovations directed at development of students' creativity; it is based on using student-centered educational technologies, solving real-world problems specific to a specific workplace.
Transdisciplinarity Principle	Ensures application of a scientific approach drawing out of specific disciplines and allowing for achievement of higher level results.
Inclusivity principle	Ensures a student-centered approach, generation of an individual educational path based on the points of view both of the student and the organization in which he/she works in order to obtain a coherent profile or a professional directivity profile of EP.
Resource spend optimization principle	It is directed at resource cost reduction (cost of education, time expenditure, material and technical support, etc.) on the part of all participants of an educational process involving WBL.
Structured (organizational) capability principle	To improve the collaboration between all WBL partners it is necessary to establish structures such as regular (WP) meetings, planning workshops, feedback tools, guidelines for communication, HE support at WP, change management teams etc.
Self-determination principle	Self-determination in the EP requires trust in the WBL partners and structural guidance. The students should be involved in the definition learning content depending on their level of proficiency (BA, MA, PhD). WP tutors, peer students and HE mentors function as supporters,

	discussant and facilitators rather than trainers or commanders.
Training and support principle	In order to continually develop the WBL programme the university provides the partners with workshops, training courses, a service support department for students and tutors, online support on the website, joint meetings in the WP, support tools for the EP process etc.
Triad approach principle	It is directed at seamless harmonizing the interests of the HEI, the employer's representative and the student based on combining three educational activity control circuits in order to provide the required quality of personnel training.
Corporativity Principle	Requires a particular consolidation of all participants of an educational process involving WBL-technologies i.e. creation of an interim training-work personnel carrying out the shared mission.

The system of principles of the methodological framework for Work-based Learning in HE precludes the possibility of occurrence of different inappropriacies:

- discordance of objectives set by representatives of interested parties;
- differentiation of methodological WBL application platforms;
- impossibility of reducing the EP implementation time under observance of compliance with the statutory and regulatory requirements;
- rapid rise in the educational program cost during business depression or under conditions of slower rising in personal incomes.

Model of methodological framework for Work-based Learning in HE

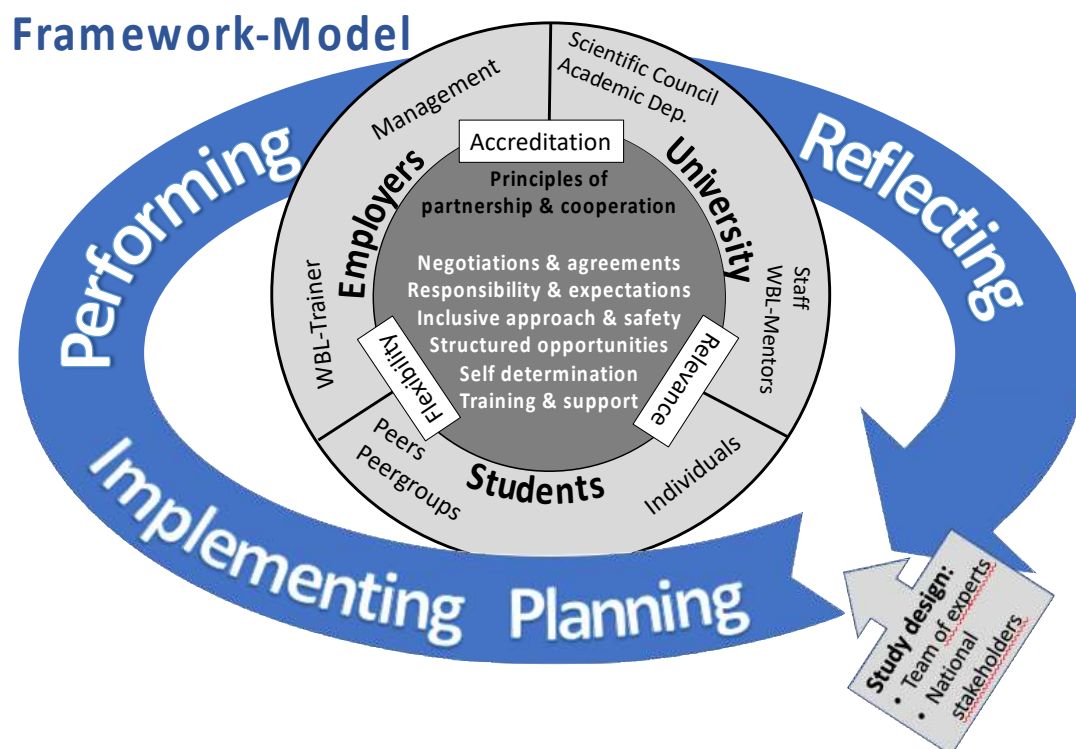
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Appendix 4.

The framework model is based on the three pillars for WBL-programmes of Garnett (2005) which are

- the participating organisations
- the programme structure
- the people involved

The participating organisations consist of internal organisations which are mainly the HEIs. They are responsible for ensuring the programme functions well. They also award qualifications, set standards and facilitate learning. In addition WBL programmes depend on external organisations and support teams. On the one hand this should be a team of experts which is responsible for the development of a framework and the design of the study. On the other hand the programme needs national stakeholders and policy makers.



FlexWBL Framework-Model (Nausner, 2020)

The programme structure is based on process-continuing-circle-system which is defined by specific periods of the educational process. The integrated learning process of WBL programmes takes place in real practices (outside classroom) integrated with the theory (inside classroom) in accompanying university courses. The learning process is started with the planning and the implementing of the programme supported and coordinated by the external organisations. While performing in the WP the focus is on constant development of appropriate roles of the learners in order to learn and apply skills (Billet, 2009) in the integrated learning setting. At the end of the first circle the process of reflection makes the difference to none-continuing-systems. Reflection is highly effective (Seyfried & Seel, 2005; Rigg & Tregan, 2008; Heyler, 2015). It represents the link to the next planning process and is the basis of developing the programme as well as the personal proficiency of all WBL-partners.

The third pillar of WBL are the people involved. First of all these are the students. They are the reason why the WBL programme exists. They must be engaged in work activities and are made to learn about and through work activities (Billet, 2009). They can be involved as individuals or in organized peer groups in the same WP. Next there are the WP tutors and members of the company managements. They are mainly responsible for the communication and performing process in the WP. Last but not least, there are the academic staff (teaching, mentoring, administrative & technical) members of the HEI. They are responsible for establishing strong relationships with external partners (development teams) and keep the contact with the members of the study programme's overarching expert teams. The guiding principles of partnership and cooperation for the people involved consist of the concepts of partnership, flexibility, relevance and accreditation by Reeve & Gallacher (2002) and of the principles of an inquiry learning process such as trust, self-determination, clearness, safety, structuring the process and the concept of personalization (Reitinger, 2015; 2016).

Plan of implementation of the methodological framework for Work-based Learning in HE

Application of Work-based Learning in HE is connected with specific problems, and phasing in of the methodological framework is required.

Appendix 5. Stages and phases of implementation of the methodological framework for Work-based Learning in HE of Armenia and Russia

Stages	Phases
1. Development	1.1
2. Implementation	2.1
3. Implementation monitoring	3.1
4. Assessment of implementation effectiveness	4.1



Infrastructure of the methodological framework for Work-based Learning in HE

learning principles and outcomes, contents of university courses and WP learning, assessment and recognition. You will also find internal and external support teams, a commitment of collaboration and the installation of a change management team in foundational level. Intermediate levels will also provide reflecting and improving tools, training courses for all partner and joint planning teams/workshops. In advanced programmes the focus is set on the developing of inquiry learning, self determination structures in the EP and the developing of joint visions by a joint WBL team.

The three levels of maturity with the focuses mentioned above can also be found in the process components.

FlexWBL Development of Resources

	Planning	Implementing	Performing	Reflecting
Foundation	<ul style="list-style-type: none"> WBL Advisory Committee meeting workshops (project plans, agreements, etc. = foundation toolkit) WBL-accompanying courses change management (improving/changing of courses) 	<ul style="list-style-type: none"> WBL-curriculum (prior learning assessment/recognition) service support department (support for students, tutors, administration) WBL-university courses & programmes change management committee 	<ul style="list-style-type: none"> regular meetings provide information package on WP (safety, guidelines etc.) communication & contact high level of guidance/support (frequent progress checks) support of peer group feedback on/during work 	<ul style="list-style-type: none"> reflecting&analysing process with focus on support, implementation, performing in HEI and WP feedback (WP-team = students, WP&HEI-supporters) define subjective relevant conditions, processes etc. to reflect on
Intermediate	<ul style="list-style-type: none"> feedback of reflecting process (intermediate toolkit) qualification trainings for WP-tutors and HEI-supervisors meeting workshops (joint planning) effective use of ICT (blended learning, etc.) meet for joint planning (WP-tutors, HEI-supervisors and – instructors, students) 	<ul style="list-style-type: none"> qualification trainings for WP-tutors and HEI-supervisors (focus: from supervisor to facilitator of learning) adopted learning courses (integrated model) provide a variety of approaches to WBL self-assessment guidelines 	<ul style="list-style-type: none"> WP-challenges for WP-teams (problems, success & mistakes) independent work of students (focus: responsibility) = self directing learning integrate theory in problem solving, process improvement, etc. = experimental learning 	<ul style="list-style-type: none"> reflect on curriculum, assessment and recognition complete WBL Activity Evaluation reflect on WBL project if it fulfils the measurement criteria of validity and reliability identify, utilise and measure the performative value of knowledge
Advanced	<ul style="list-style-type: none"> (advanced toolkit) inquiry learning self determination of students personalization team processes 	<ul style="list-style-type: none"> coaches/teams for inquiry learning and self determination structures for inquiry learning 	<ul style="list-style-type: none"> independent work of students (focus: self determination) = inquiry learning control/design team processes entrepreneurship/leadership 	<ul style="list-style-type: none"> develop a written improvement plan in WP-team modify improvement plans lay down visions of future WBL-projects in writing

FlexWBL development of resources (Nausner, 2020)

The foundation level again describes a minimum for the start of a programme. The process-continuing-circle-system allows a permanent process of improving the programme in developing the human, organizational and structural resources.

Methodological toolkit for implementation of the methodological framework for Work-based Learning in HE

In order to successfully implement the methodological framework in practice it
is necessary to develop:

- methodological toolkit for practical implementation;
- practical implementation templates.

PH-Linz

Appendix 7.

Implementation of the FlexWBL Framework at _____

No 1	Basic WBL Components	Features of Flex WBL at
1.1	Placement of the programmes	
1.2	Status Quo Analysis (financial, structural and human resources)	
1.3	<p>Building awareness standards:</p> <ul style="list-style-type: none"> ● values and culture ● partnership and cooperation ● market needs ● personal needs <p>Building awareness for resulting changes:</p> <ul style="list-style-type: none"> ● structures and processes ● products ● development of proficiency <p>Building awareness for Process-Continuing-Circle-System (planning-implementing-performing-reflecting)</p>	
1.4	<p>Seeing the Benefits of WBL</p> <ul style="list-style-type: none"> ● students ● HEI ● employers ● stakeholders 	

1.5	Describing visions	
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No 2	Curricular Components	
2.1	Placement of the programme <ul style="list-style-type: none"> • BA, MA, PhD • modes of WBL (internship...) • definition of semesters • possibility of flexible study timetables 	
2.2	Qualification for Access (prior learning assessment/recognition)	
2.3	Leading Principles	
2.4	University Courses Accompanying WBL	
2.5	Contents/Syllabus of University Courses	
2.6	Learning Outcomes of University Courses	
2.7	Contents of Workplace Learning	
2.8	Learning Outcomes of Workplace Learning	
2.9	Assessment and Recognition	
	What Else is to be Considered?	

No 3	Development of Resources	
3.1	External Resources:	

	<p>Team of experts</p> <p>National stakeholders</p>	
3.2	<p>Counselling and Services Provided by the HEI:</p> <ul style="list-style-type: none"> • Advisory Committee (consisting of HEI, students and employers) • WBL-Service Centre (for all partners) • Information WBL-Website (for students) • Active support of the student by the employer 	
3.3	<p>Human & Structural Resources</p> <ul style="list-style-type: none"> • WP-tutor (from supervisor to responsible person for supporting individual learning path) • HEI-teachers improve their skills in pedagogical theories and practice, especially using ICT • workshops for students, employers and HEI-staff • training courses for HEI-mentors and WP-tutors • team for development and change management 	
3.4	<p>Use of ICT and Distance Learning Technologies</p> <ul style="list-style-type: none"> • regular video meetings • learning platforms • ePortfolios • blended learning (course & WP) • flipped classroom • eTools • 	

FlexWBL Process Implementation

No 4	Planning	
4.1	<p>Level 1 (foundation)</p> <ul style="list-style-type: none"> • WBL Advisory Committee • meeting workshops (project plans, agreements etc.) • flexible study timetable (programme plans) • effective use of ICT and distance learning technologies 	
4.2	<p>Level 2 (intermediate)</p> <ul style="list-style-type: none"> • integration of feedback and reflecting process into planning • qualification trainings for HEI-mentors and/or WP-tutors • meeting workshops for joint plannings to improve WBL in the context of WP and University courses (WP-tutors, HEI-mentors and instructors, students) • 	
4.3	<p>Level 3 (advanced)</p> <ul style="list-style-type: none"> • implementing inquiry learning in the WP and University courses • high degree of self determination of students in the WP • possibility for students to take part/lead team processes in the WP 	

No 5	Implementing	
5.1	Level 1 (foundation) <ul style="list-style-type: none"> • WBL-curriculum (prior learning assessment/recognition) • Service support department for students, HEI-tutors, WP-mentors & administration • WBL university courses and WPs • change management committee 	
5.2	Level 2 (advanced) <ul style="list-style-type: none"> • qualification trainings for HEI-mentors and WP-tutors (focus: from supervisor to facilitator of learning) • adopted learning courses (Integrated model) • a variety of approaches to WBL is provided • self-assessment guidelines 	
5.3	Level 3 (advanced) <ul style="list-style-type: none"> • coaches/teams for inquiry learning and self determination • structures for inquiry learning 	

No 6	Performing	
6.1	Level 1 <ul style="list-style-type: none"> • regular meetings in the WP • provide information packages 	

	<p>on WP (safety, guidelines etc.)</p> <ul style="list-style-type: none"> • communication & contact • high level of guidance/support (frequent progress checks) • support of peer groups • feedback on/during work 	
6.2	<p>Level 2</p> <ul style="list-style-type: none"> • WP-challenges for WP-teams (problems, success & mistakes) • independent work of students (focus: responsibility) = self directed learning • integrated theory in problem solving, process improvement, etc. = experimental learning 	
6.3	<p>Level 3</p> <ul style="list-style-type: none"> • independent work of students (focus: self determination) = inquiry learning • control/design team processes • entrepreneurship/leadership 	

No 7	Reflecting (=> change management committee)	
7.1	<p>Level 1</p> <ul style="list-style-type: none"> • reflecting&analysing process with focus on support, implementation, performing in HEI and WP • feedback (WP-team =students, WP-tutor, HEI-supporters) 	

	<ul style="list-style-type: none"> define subjective relevant conditions, processes etc. to reflect on 	
7.2	<p>Level 2</p> <ul style="list-style-type: none"> reflect on curriculum, assessment and recognition complete WBL Activity Evaluation reflect on WBL project if it fulfils the measurement criteria of validity and reliability identify, utilise and measure the performative value of knowledge 	
7.3	<p>Level 3</p> <ul style="list-style-type: none"> develop a written improvement plan in WP-team modify improvement plans lay down visions of future WBL-projects in writing 	

Guiding questions to the implementation of the FlexWBL Framework:

No 1	Basic WBL Components	
1.1	<p>Placement of the programmes</p> <p>Guiding questions:</p> <p>What is the level of proficiency for the programme (BE, MA,...)?</p> <p>Which running mode of WBL is selected for the programme (internships/apprenticeship – traineeship – entrepreneurship)?</p> <p>What is the duration of the programme?</p> <p>What is the workload for the students during the programme and how many</p>	

	credits/hours are assigned for it (ECTS)? Which qualification/degree will be awarded to the students at the end of the programme?	
1.2	Status Quo Analysis Guiding questions: Do our students earn any money during the programme? How many students can study in our programme? How many people are engaged in the process of curriculum development? Which people are engaged in the process of curriculum development (employers, academic staff)? Who is responsible for curriculum approval? Of which people is the academic staff put together? (employers, teaching staff, etc.) Who is responsible for the continuing developing process of the programme? What is absolutely necessary to start a programme (financial, structural, human resources)?	
1.3	Building Awareness Guiding questions: Which individual values do we want to promote in our programme? Which collective values do we want to promote in our programme? Which depth of knowledge do we want to promote in our programme? How do we want to meet the historically grown challenges in our programme? Which competences, habits, soft skills help us to meet personal needs and market needs? Which principles of partnership and cooperation do we consider necessary? Which principles of partnership and cooperation promote personal development of proficiency? Which principles of partnership and cooperation promote collaboration between HEI, students and employers? What has to be done on a curricular, structural and collaborational basis to meet these needs? Which are the theoretical, structural and organisational requirements to implement a continuing developing process for our programme?	
1.4	Seeing the Benefits of WBL Guiding questions: What are the benefits for the participating students? What are the benefits for the participating HE institutions? What are the benefits for the employers? What are the benefits for stakeholders?	
1.5	Describing Visions Guiding questions: What is our vision concerning principles of partnership and cooperation? What is our vision concerning personal development of proficiency of our students? What is our vision for a continuing developing process for our programme?	

No 2	Curriculum Components	
2.1	Placement of the Programme Guiding questions: What is the code of the study programme? What is the title of the study programme? Which qualification/degree will be awarded to the students at the end of the programme (BA, MA degree, PhD)? In which field can the students be employed after the programme?	
2.2	Qualification for Access Guiding questions: Which qualification do the students need to access the programme? How is prior learning (if it is part of the qualification) officially recognised?	
2.3	Learning Principles Guiding questions: What is the main goal for the study programme? For which level of proficiency is our programme meant and which leading principles can help to meet the targets?	
2.4	University Courses Accompanying WBL Guiding questions: How is the curriculum structured (in-class lectures, workplace learning)? How are the credits specified (ECTS - total number of academic hours/practical and theoretical work/hours assigned for individual work of students outside university and workplace)? How is the workload of the students assigned the time structure (weekly, monthly, single days or period of days at the workplace)? How is the study programme designed (mandatory courses, students presence at university, blended learning, flipped learning courses)?	
2.5	Contents/Syllabus of University Courses Guiding questions: What are the main contents for the (mandatory) university courses? How do the contents correspond with the contents of workplace learning opportunities? Are reflective learning techniques and autonomous learning integrated in the interplay of the integrated learning environment?	
2.6	Learning Outcomes of University Courses Guiding questions: What are the learning outcomes for the (mandatory) university courses? Do the learning outcomes also meet the leading principles mentioned above?	
2.7	Contents of Workplace Learning Guiding questions: What are the main contents for the workplace learning structures?	

2.8	Learning Outcomes of Workplace Learning Guiding questions: What are the learning outcomes for workplace learning opportunities? Do the learning outcomes also meet the leading principles mentioned above?	
2.9	Assessment and Recognition Guiding questions: What kind of assessment is highly appropriate to go with integrated learning opportunities (workplace and university courses)? What kind of assessment is highly appropriate at the end of the programme? Does self-assessment play a role in the education in university and in the workplace? Does reflecting play any role in the assessment process? Which elements of reflecting is the focus on?	

	What Else is to be Considered?	
	Guiding questions: Who is responsible for curriculum approval? Which guidelines from external persons/organisations/stakeholders are to be met in the curriculum design? Is the curriculum designed to allow changes in continuing developing processes of the programme? Is there a flexible study timetable possible/planned/developed (in accordance with the curriculum)?	

No 3	Development of Resources	
3.1	External Resources Guiding questions: Which external teams are installed and which functions do they have? Which functions would be helpful to support the programme?	
3.2	Counselling and Services Provided by the HEI Guiding questions: Which organisational & structural resources are/are to be installed? Is there an Advisory Committee and who is part of it? Are there any WBL-Service Centres and for which persons do they provide support (students, academic staff, employers)? What kind of information/adverts is provided for students and where/how (websites, folders, information events ...)?	
3.3	Human & Structural Resources <i>Human Resources</i> Guiding questions: Which persons are involved in the programme (academic staff, teaching staff, administrative and technical support)? Which development teams are engaged in the process (curriculum, advising support, programme developing, change management, ...)?	

	<p>Can the HEI provide mentors for workplace learning? Can the HEI provide training/qualification courses for WP-tutors (train the trainer)? What can be done within the current resources? What do we need for ...? (visions of workshop 1) What is necessary Is there a team of experts to gather feedback and review reflections/assessment data in order to use the contents for future planning? <i>Structural & Organisational Resources</i> Guiding questions: What does the commitment on the role of the WP-tutor look like (supervisor, facilitator, supporter for individual learning path)? Is there any possibility for HEI-mentors to plan and support the workplace learning in the workplace? Are there any (joint) workshops for students, WP-tutors and HEI-staff in the programme? Are there any training/qualification courses for HEI-mentors and/or WP-tutors?</p>	
3.4	<p>Use of ICT and Distance Learning Technologies Guiding questions: To what extent are ICT and distance learning technologies integrated in the programme? Which learning platforms and content management tools are available (Moodle, Teams,...)? Which personal learning environment platforms and ePortfolios are in use/provided (Mahara, Karuta,...)? Which video conference tools are provided (Zoom, Google meet, Teams,...) Are there any workshops/training courses for students, employers, HEI-staff?</p>	
	Gather questions, obstacles and challenges from participating universities.	
No 4	<p>Planning (referring to the FlexWBL Outline No 4) Guiding questions: Which level of maturity will the selected programme reach in the process of planning? What can be done to reach the next level? What will be the next steps during the programme?</p>	
No 5	<p>Implementing (referring to the FlexWBL Outline No 5) Guiding questions: Which level of maturity will the selected programme reach in the process of implementing? What can be done to reach the next level? What will be the next steps during the programme?</p>	
No 6	<p>Performing (referring to the FlexWBL Outline No 6) Guiding questions: Which level of maturity will the selected programme reach in the process of performing? What can be done to reach the next level? What will be the next steps during the programme?</p>	

No 7	Reflecting & Change Management (referring to the FlexWBL Outline No 6) Guiding questions: Which level of maturity will the selected programme reach in the process of reflecting? What can be done to reach the next level? What will be the next steps during the programme?	
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No 4	Outline-Implementation & Algorithms	
4.1	Basic WBL Components (FlexWBL Outline No 1) Guiding questions: Which components must be put in a methodological framework draft of our university? Which information is still missing/should be added?	
4.2	Curricular Components (FlexWBL Outline No 2) Guiding questions: Does our curriculum meet the criteria of the FlexWBL framework? Which components in our curriculum must be modified? Does our curriculum allow a development throughout the programme?	
4.3	Development of Resources (FlexWBL Outline No 3) Guiding questions: Which level of maturity will be best to start our programme? Which level can realistically be reached throughout the duration of the programme? Which forms of ICT use and distance learning are appropriate within the programme considering the equipment and qualification of the participating persons?	
4.4	Planning (FlexWBL Outline No 4) Guiding questions: Do we meet the planning level 1 (foundation) requirements? Which elements of level 2 (intermediate) and level 3 (advanced) can be realistically integrated in our programme?	
4.5	Implementing (FlexWBL Outline No 5) Guiding questions: Do we meet the implementing level 1 (foundation) requirements? Which elements of level 2 (intermediate) and level 3 (advanced) can be realistically integrated in our programme?	
4.6	Performing (FlexWBL Outline No 6) Guiding questions: Do we meet the performing level 1 (foundation) requirements? Which elements of level 2 (intermediate) and level 3 (advanced) can be realistically integrated in our programme?	
4.7	Reflecting (FlexWBL Outline No 7)	



	<p>Guiding questions:</p> <p>Do we meet the reflecting level 1 (foundation) requirements?</p> <p>Which elements of level 2 (intermediate) and level 3 (advanced) can be realistically integrated in our programme?</p>	
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Procedures for implementation of the methodological framework for Work-based Learning in HE

Deliverables of implementation of the methodological framework for Work-based Learning in HE

The Concept methodological framework for Work-based Learning in HE states that the deliverables of implementation can be assessed through a prism of benefits for each stakeholder group (Table 8).

Appendix 8. Benefits of implementation of the methodological framework for Work-based Learning in HE

Stakeholders	Potential Benefits
Students	
Employer's organization	
HEIs involving WBL	
Labour market	
Society	

For assessment of deliverables of implementation of the methodological framework for Work-based Learning in HE, the following indicators can be used:

- the indicators of satisfaction of students;
- the indicators of satisfaction of employers' organizations;
- integral indicators of performance and mission effectiveness assessment of HEI activity in HE, based on WBL.

Indicator framework for assessment of implementation of the methodological framework for Work-based Learning in HE

1. Partnership between students, the HEI and employers to improve the quality of education and promote the career growth of students and graduates.

1.1. The positive dynamics of number of partnership agreements with organizations.

1.2. The positive dynamics of number of WBL-based "tripartite" contracts with organizations.

1.3. Absence of graduates registered in the labour exchange.

1.4. The share of graduates working in the region where the university is situated.

2. Correspondence of the EP to the needs of the student and the organization in which he/she works.

2.1. The degree of satisfaction of employers with the graduate training quality (peer review).

2.2. Effectiveness of HEI departments dealing with problems connected with employment and employability of graduates (peer review).

2.3. The positive dynamics of number of contracts for employer-sponsored education from organizations.

3. Active use of ICT and distance learning technologies.

3.1. Number of computer units per 100 PEP students.

3.2. The share of internet-based computers used for educational purposes.

3.3. The share of PEPs using the educational and information file as a part of HEI's electronic educational environment.

4. Integration of various disciplines and areas of knowledge by transdisciplinary learning.

4.1. The integrated knowledge-on-demand degree on the part of the employer (peer review).

4.2. The degree of synergy in solving organizational challenges (peer review).

4.3. The formed competency-on-demand degree on the part of the employer (peer review).

5. The realism of an EP in terms of time, including the possibility of reducing or prolonging education.

5.1. Availability of a PEP with short training time in comparison with the normative one.

5.2. The degree of satisfaction of employers with the implementable PEP spectrum (peer review).

5.3. The degree of satisfaction of students and employers with the PEP implementation period (peer review).

6. Flexible study timetable.

6.1. Availability of a PEP with short training time in comparison with the normative one.

6.2. The degree of satisfaction of employers with the realizable PEP spectrum (peer review).

6.3. The degree of satisfaction of students and employers with the PEP implementation period (peer review).

7. Support for reflective practice and introspection, innovative pedagogical theories and practices.

7.1. The share of innovative pedagogical training technologies and methods in total utilization capacity.

7.2. Availability of small innovative enterprises in the HEI which are student practice bases.

7.3. The share of collaborative activities in the educational process (microgroups, etc.).

8. Innovation in training through the active involvement of employers and innovations in production

8.1. The share of employers taking part in the educational process.

8.2. Availability of joint (employers and HEIs) educational centres of different levels and types.

9. Support of the students by the employer.

9.1. The share of students to whom vacation time was granted.

9.2. The share of GQWs carried out by order of employers.

10. The special role of the tutor as the person responsible for supporting the student during the implementation of his/her individual learning path.

10.1. The degree of satisfaction of the student with functions performed by the tutor (peer review).

10.2. The degree of satisfaction of the employer with functions performed by the tutor (peer review).

11. The need for teaching staff to constantly improve their skills in new pedagogical theories and practice, especially using ICT.

11.1. The share of the teaching staff improving their skills in new pedagogical theories and practice, and ICT in total number of persons in the teaching staff involved in PEP implementation (for example, once per three years).

11.2. Availability of EPs on teaching staff skill improvement in new pedagogical theories and practice, and ICT in the HEI.

In the second phase of development of a method for assessment of the methodological framework implementation, it is prudent to carry out selection of summarizing (integral) assessment indicators and propose an indicator construction algorithm (Table 4).

Appendix 4. Integral indicators of assessment of implementation of the methodological framework for Work-based Learning in HE

Indicator	Indicator Characteristic
1. Performance indicator	Allows to assess the maximum level of achievement of stated goals in a definite (target) volume of spent resources by comparing the actual result with the threshold value.
2. Integral indicator of mission efficiency	To be determined based on integration of all assessment indicators used in implementation of the methodological framework for Work-based Learning in HE.

Standard formalized model of Integral indicators of assessment of implementation of the methodological framework for Work-based Learning in HE

IEWBL (Integral Estimation of WBL in Higher Education)

The first phase. Construction of an index system by separate areas of HEI activity involving WBL.

The second phase. Based on each assessment index, determining the reference value A_{\max} focused on the maximum (the basic requirement is sustaining the up trend).

The third phase. Determining the actual values of the primary indices by

separate areas of HEI activity involving WBL.

The fourth phase. Normalizing the actual values of the primary indices against the reference value:

$$t_{fijk} = \frac{A_{fijk}}{(A_{fijk})_{\max}} \text{ for } 0 \leq t_{fijk} \leq 1 \quad (1)$$

The fifth phase. Calculating the integral HEI WBL-based performance indicator by separate IEWBL elements; the initial indicators A_{ijk} will be used as factors-arguments.

5.1. For equivalent initial data:

$$IEWBL = \sum_{f=1}^q \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p \frac{t_{fijk}}{q;n;m;p}, \quad (2)$$

where:

f – assessed types of activity, q – number of subtypes;

i – subtypes of activity, n – number of blocks of indicators for corresponding types;

j – indicator blocks; m – number of indicators for corresponding blocks;

k – indicators constructed based on the indices; p – number of indices for corresponding indicators.

5.2. For initial data with assigned weight values B_l (by expertise):

$$IEWBL = \sum_{f=1}^q \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p \frac{t_{fijk} B_l}{q;n;m;p}, \quad (3)$$

The sixth phase. By comparison of the index values and the integral IEWBL indicator obtained with the reference values we obtain a constructed indicator of mission efficiency of HEI WBL-based activity. What is more, the reference value of the integral IEWBL indicator should correspond to the best domestic and international experience and practice.

Based on the results obtained, we carry out analysis and correct the management decisions that we make; the corrected decisions are directed at improvement of activities within the framework of EP involving WBL.

The advantages of the proposed method of integral indicator of assessment of implementation of the methodological framework for Work-based Learning in HE are as follows:

- the possibility of modification of the primary assessment indices in case of HEI environment changes, for example change of regulation approaches, due to a «skeletal structure» of the integral indicator;

- extension of representation of different changeable characteristics in the

integral indicator;

- application of the indicator normalizing method, i.e. defining its minimum and maximum values;
- comparability of results obtained from different targets of assessment independently on the student population and the resource provision volume.

The main disadvantages of the method developed:

- difficulties with determination of the maximum system capability;
- determination of weight values of separate indices by expertise creates a problem of subjectivity of assessment procedures and results obtained;
- practically compulsory availability of software-based information support of the assessment procedure.

Thus, the methods of integral indicator of assessment of implementation of the methodological framework for Work-based Learning in HE will allow:

- 1) to maximize the system capability of pursuing the goal – training of highly-qualified personnel possessing both professional and personal qualities which can promote the economic health of the government, the society, and the person;
- 2) to assess different aspects of the WBL-based EP due to the availability of the primary index "imposition" method;
- 3) to improve the WBL-based EP management efficiency;
- 4) to leverage changes in labour market needs;
- 4) to provide for the sustainable development of HE in Russia and Armenia.

Monitoring of implementation of the methodological framework for Work-based Learning in HE

The specific feature of strategic partnership of students, HEIs and enterprises, is the necessity of correspondence of the obtained results to the interests and needs of not only all participants, but of the government:

- firstly, it concerns the education quality and its meeting the labour market needs;
- secondly, it concerns the availability of higher education;
- thirdly, it concerns the efficiency of investment of capital independently on the fact who is an investor.

It is important to note such a specific feature of partnership of different interested parties in the educational process as the level and quality of stakeholder relations which creates a need of monitoring the process of implementation of the framework for Work-based Learning in HE. Table 9 shows the monitoring characteristics of the process of implementation of the framework for Work-based Learning in HE.

Table 9. Characteristic of monitoring of the process of implementation of the methodological framework for Work-based Learning in HE

Parameters	Implementation processes (activities to be conducted)	Implementation results
Monitoring object		
Monitoring indicators		
Monitoring results		
Managerial decisions on monitoring results		

Conclusion

The problems in higher education systems in countries of the world community including Russia and Armenia (lowering of unit costs for education in gross domestic product; ambiguous influence of globalization processes; growth in universities, and as a consequence of this, student population increase especially students on a fee paid basis; low education quality; dissatisfaction of the labour market with personnel training quality) defined a strategic goal – improving the higher education quality based on activation of innovative processes and leveraging the stakeholders' (firstly, employers') requirements.

As part of the study, the task of development of the methodological framework for Work-based Learning in HE of Armenia and Russia was set. The Concept methodological framework for Work-based Learning in higher education of Armenia and Russia was developed.

The framework implementation performance and effectiveness assessment process is of the great importance. Herewith, the study figures that the assessment procedures in this area have a set of features hampering their practical application: the complexity of calculation of assessment indicators; ambiguity of assessment indicator interpretation; differentiation and certain nonconformity of the assessment procedures applied; absence of analogous indicators in the international practice system.

We think that development and practical implementation of the methodological framework for Work-based Learning in HE of Armenia and Russia will allow:

- to standardize the processes and procedures within the framework of WBL-based EPs;
- to ensure accountability of all educational process participants for content and training quality;
- to implement the EPs meeting stakeholder expectations;
- to ensure involvement of commercial and non-commercial organizations in the educational process;
- to improve management efficiency in HEIs at all levels;

The innovative trend of higher education of Armenia and Russia provided with effective pedagogical education organization and management technologies and models including WBL will allow to close the gap between the EPs and both the time and labour market needs as well as to prevent declining in demand for graduates in the labour market.

References

Bacigalupo, M., Kampylis, P., Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union; ,EUR 27939 EN; doi: 10.2791/593884.

Billet, S. (2009). Realizing the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34 (7), (827-843).

Dremina M.A., Davydova N.N., Kopnov V.A. (2016). Lifelong Learning in Russia: History, Concepts & Practices. Multilingual Academic Journal of Education and Social Sciences, February 2016, Vol. 4, No. 1, pp. 30-56.

Eraut, M. & Hirsch, W. (2007). The significance of Workplace Learning for Individuals, Groups and Organisations, SKOPE Monograph 9, Oxford.

European Commission. (2016). A new skills agenda for Europe: Working together to strengthen human capital, employability and competitiveness. European commission staff working document. SWD (2016) 195 final, part ¼. Brussels.

Gallacher, J. & Reeve, F. (2002) *Work-based Learning: The Implications for Higher Education for Supporting Informal Learning in the Workplace*. Milton Keynes: Open University.

Garnett, J. (2005). University Work Based Learning and the Knowledge Driven Project in Rounce, K. and Workman, B. (Eds.): *Work Based Learning in Healthcare*. Chichester: Kingsham.

Talbot J., Costley C., Dremina M.A., Kopnov V.A. (2017a). A Review of the Practice of Work-Based Learning (WBL) at Higher Education Level in the UK. *The Education and Science Journal*. No.1. pp.119-141. DOI: 10.17853/1994-5639-2017-1-119-141.

Helyer, R. (2015). "Learning through reflection: the critical role of reflection in work-based learning (WBL)", *Journal of Work-Applied Management*, Vol. 7 Issue: 1, pp.15-27, <https://doi.org/10.1108/JWAM-10-2015-003>

Linehan, M. (2016). *Work-Based Learning, Graduating Through The Workplace*. CIT Press: Bishopstow.

Nausner, E. (2020). Presentation of the FlexWBL Framework in the HE of Russia and Armenia. http://files.flexwbl.org/index.php/apps/files/?dir=/FlexWBL/WP2/WP_2.1&fileid=656

Major, D. (2016). „Models of work-based learning, examples and reflections“, *Journal of Work-Applied Management*, Vol. 8 Issue: 1, pp.17-28, <https://doi.org/10.1108/JWAM-03-2016-0003>

O'Sullivan, J. (2003). Unlocking the Workforce Potential: is support for effective continuing professional development the key? *Research in Post-Compulsory Education*. 8 (1), 107-122.

Reitinger, J. (2015). Self-Determination, Unpredictability, and Transparency: About the Nature and Empirical Accessibility of Inquiry Learning. *Schulpädagogik heute*, H.12(2015), 6. Jg., Prolog-Verlag.

Reitinger, J., Haberfellner, C., Keplinger, G. (2016). An Overview of the Theory of Inquiry Learning Arrangements (TILA). In: *Theory of Inquiry Learning Arrangements, Research, Reflection, and Implementation*. Kassel: University Press.

Rig, C. & Trehan, K. (2008). Critical reflection in the workplace: is it just too difficult? *Journal of European Industrial Training*, Vol. 32, No 5, pp. 374-384, <https://www.researchgate.net/publication/235251829>

Seyfried C./Seel A. (2005): Subjektive Bedeutungszuschreibung als Ausgangspunkt schulpraktischer Reflexion. In: *Journal für LehrerInnenbildung* 1, 17–24.

Talbot J., Costley C., Dremina M.A., Kopnov V.A. (2017b). A review of the basic elements, organizational and theoretical foundations of work-based learning (WBL) in the higher education. *The Education and science journal*. 2017;19(6):91-118. DOI:10.17853/1994-5639-2017-6-91-118.

Project partners' publications

Дремина, М.А., Копнов, В.А., Шмурыгина, О.В. (2018а). Применение принципов европейской системы зачетных единиц (ECVET) для профессионального образования и обучения на рабочем месте (WBL). *Вестник ВГУ. Серия: Проблемы высшего образования*. № 3. С. 88-93.

Дремина М.А., Копнов В.А. (2018b). Work-based Learning: организационный дизайн и педагогические технологии. III Всероссийская конференция: «Кадровая политика университетов: практики консолидации человеческого капитала», 11-12 октября 2018 г., Москва, ВШЭ. Available at: https://www.academia.edu/37571851/Work-based_Learning_%D0%BE%D1%80%D0%B3%D0%B0%D0%BD%D0%B8%D0%B7%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%BD%D1%8B%D0%B9_%D0%B4%D0%B8%D0%B7%D0%B0%D0%B9%D0%BD_%D0%B8_%D0%BF%D0%B5%D0%B4%D0%B0%D0%B3%D0%BE%D0%B3%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B8%D0%B5_%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D0%B8

Копнов В.А., Шмурыгина О.В. (2018a). Обучение на рабочем месте: интеграция образования и общества. Инновации в профессиональном и профессионально-педагогическом образовании: материалы 23-й Международной научно-практической конференции, 24–25 апр. 2018 г. Екатеринбург: Изд-во РГППУ, 2018. С. 644-646.

Kopnov V.A. (2018b). Work-based learning: an educational strategy integrating youth and society. The Jean Monnet conference "Excellence in EU Studies", 19-20 April 2018, Moscow. 20 p., 2018. Available at: https://www.academia.edu/36722167/Work-based_learning_an_educational_strategy_integrating_youth_and_society

Eduard Podgaiskii, Work-based Learning: new perspectives for Enterprise-University collaboration. CALMet XIII / Eumetcal Conference, 17-20 September 2019. EUMETSAT, Darmstadt, Germany, pp. 35-36.

Bedenko N.N., Bakhtigulova L.B., Kaftan V.V., Poliakova I.V., Klychkov K.Ye. Formation of Students' Motivational Readiness for Their Future Professional Activities // Opcion. 2019. V.35, Esp. N.19. P.2337-2365.

Бородина А.В. Технологии WBL в контексте пандемии COVID-19: международный опыт // Проблемы управления социально-экономическими системами: теория и практика: материалы VIII Междунар. науч.-практ. конф. – Тверь: Твер. гос. ун-т, 2020. – С. 137 – 142.

Беденко Н.Н., Мичкова О.А., Мамитова И.Е. Концепция «Work based learning» в системе управленческо-экономического образования // Современные экономическая наука: теоретический и практический потенциал. Инновационное развитие современного экономического образования: материалы Международной научно-практической конференции. – Ярославль, 2020. – С. 416-421.

Беденко Н.Н., Сергеева М.Г., Чегринцова С.В. «WORK BASED LEARNING» в системе высшего образования: управленческо-экономические и педагогические аспекты: монография. – Тверь: Тверской государственный университет, 2020. – 155 с.

Беденко Н.Н., Чегринцова С.В., Мамагулашвили Д.И. Структура профессиональной компетенции тьютора в системе WBL высшего образования // Вестник Тверского государственного университета. Серия: Экономика и управление. – 2020. – №1.- С. 1-10.

Sergeeva M.G., Lukashenko D.V., Burnakin M.N., Bedenko N.N., Kolchina V.V. THE PEDAGOGICAL TECHNOLOGY OF MANAGER PROFESSIONAL POTENTIAL DEVELOPMENT IN THE SYSTEM OF BUSINESS EDUCATION //t Revista Turismo Estudos & Práticas. 2020. № S3. С. 3.

Чегринцова С.В. WBL-технологии в системе высшего образования глазами студентов // Проблемы управления социально-экономическими системами: теория и практика: материалы VIII Международной научно-практической конференции – Тверь: Тверской государственный университет, 2020. – 217 с.

Dremina, M.A., Kopnov, V.A., SHmurygina, O.V. (2018a). Primenenie principov evropejskoj sistemy zachetnyh edinic (ECVET) dlya professional'nogo obrazovaniya i obucheniya na rabochem meste (WBL). Vestnik VGU. Seriya: Problemy vysshego obrazovaniya. № 3. S. 88-93.

Dremina M.A., Kopnov V.A. (2018b). Work-based Learning: organizacionnyj dizajn i pedagogicheskie tekhnologii. III Vserossiyskaya konferenciya: «Kadrovaya politika universitetov: praktiki konsolidacii chelovecheskogo kapitala», 11-12 oktyabrya 2018 g., Moskva, VSHE.

Available at: https://www.academia.edu/37571851/Work-based_Learning_%D0%BE%D1%80%D0%B3%D0%B0%D0%BD%D0%B8%D0%B7%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%BD%D1%8B%D0%B9_%D0%B4%D0%B8%D0%B7%D0%B0%D0%B9%D0%BD_%D0%B8_%D0%BF%D0%B5%D0%B4%D0%B0%D0%B3%D0%BE%D0%B3%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B8%D0%B5_%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D0%B8

Kopnov V.A., SHmurygina O.V. (2018a). Obuchenie na rabochem meste: integraciya obrazovaniya i obshchestva. Innovacii v professional'nom i professional'no-pedagogicheskom obrazovanii: materialy 23-j Mezhdunarodnoj nauchno-prakticheskoy konferencii, 24–25 apr. 2018 g. Ekaterinburg: Izd-vo RGPPU, 2018. S. 644-646.

Kopnov V.A. (2018b). Work-based learning: an educational strategy integrating youth and society. The Jean Monnet conference "Excellence in EU Studies", 19-20 April 2018, Moscow. 20 p., 2018. Available at: https://www.academia.edu/36722167/Work-based_learning_an_educational_strategy_integrating_youth_and_society

Eduard Podgaiskii, Work-based Learning: new perspectives for Enterprise-University collaboration. CALMet XIII / Eumetcal Conference, 17-20 September 2019. EUMETSAT, Darmstadt, Germany, pp. 35-36.

Bedenko N.N., Bakhtigulova L.B., Kaftan V.V., Poliakova I.V., Klychkov K.Ye. Formation of Students' Motivational Readiness for Their Future Professional Activities // Opcion. 2019. V.35, Esp. N.19. P.2337-2365.

Borodina A.V. Tekhnologii WBL v kontekste pandemii COVID-19: mezhdunarodnyj opyt // Problemy upravleniya social'no-ekonomicheskimi sistemami: teoriya i praktika: materialy VIII Mezhdunar. nauch.-prakt. konf. – Tver': Tver. gos. un-t, 2020. – S. 137 – 142.

Bedenko N.N., Michkova O.A., Mamitova I.E. Konceptiya «Work based learning» v sisteme upravlenchesko-ekonomicheskogo obrazovaniya // Sovremennye ekonomicheskaya nauka: teoreticheskij i prakticheskij potencial. Innovacionnoe razvitie sovremennogo ekonomicheskogo obrazovaniya: materialy Mezhdunarodnoj nauchno-prakticheskoy konferencii. – YArosavl', 2020. – S. 416-421.

Bedenko N.N., Sergeeva M.G., CHegrincova S.V. «WORK BASED LEARNING» v sisteme vysshego obrazovaniya: upravlenchesko-ekonomicheskije i pedagogicheskie aspekty: monografiya. – Tver': Tverskoj gosudarstvennyj universitet, 2020. – 155 s.

Bedenko N.N., CHegrincova S.V., Mamagulashvili D.I. Struktura professional'noj kompetencii t'yutora v sisteme WBL vysshego obrazovaniya // Vestnik Tverskogo gosudarstvennogo universiteta. Seriya: Ekonomika i upravlenie. – 2020. – №1.- C. 1-10.

Sergeeva M.G., Lukashenko D.V., Burnakin M.N., Bedenko N.N., Kolchina V.V. THE PEDAGOGICAL TECHNOLOGY OF MANAGER PROFESSIONAL POTENTIAL DEVELOPMENT IN THE SYSTEM OF BUSINESS EDUCATION //Revista Turismo Estudos & Práticas. 2020. № S3. S. 3.

CHegrincova S.V. WBL-tehnologii v sisteme vysshego obrazovaniya glazami studentov // Problemy upravleniya social'no-ekonomicheskimi sistemami: teoriya i praktika: materialy VIII Mezhdunarodnoj nauchno-prakticheskoy konferencii – Tver': Tverskoj gosudarstvennyj universitet, 2020. – 217 s.