



Evaluation of WBL learning outcomes in EQAVET framework

WBL Toolkit: Evaluation of Work Based Learning outcomes in EQAVET framework

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Introduction

This Toolkit was developed based on a Model for the creation of a work-based learning (WBL) Path based on the phases of the European Quality Assurance Framework (EQAVET+) quality cycle.

The four (4) phases of the EQAVET quality cycle are:

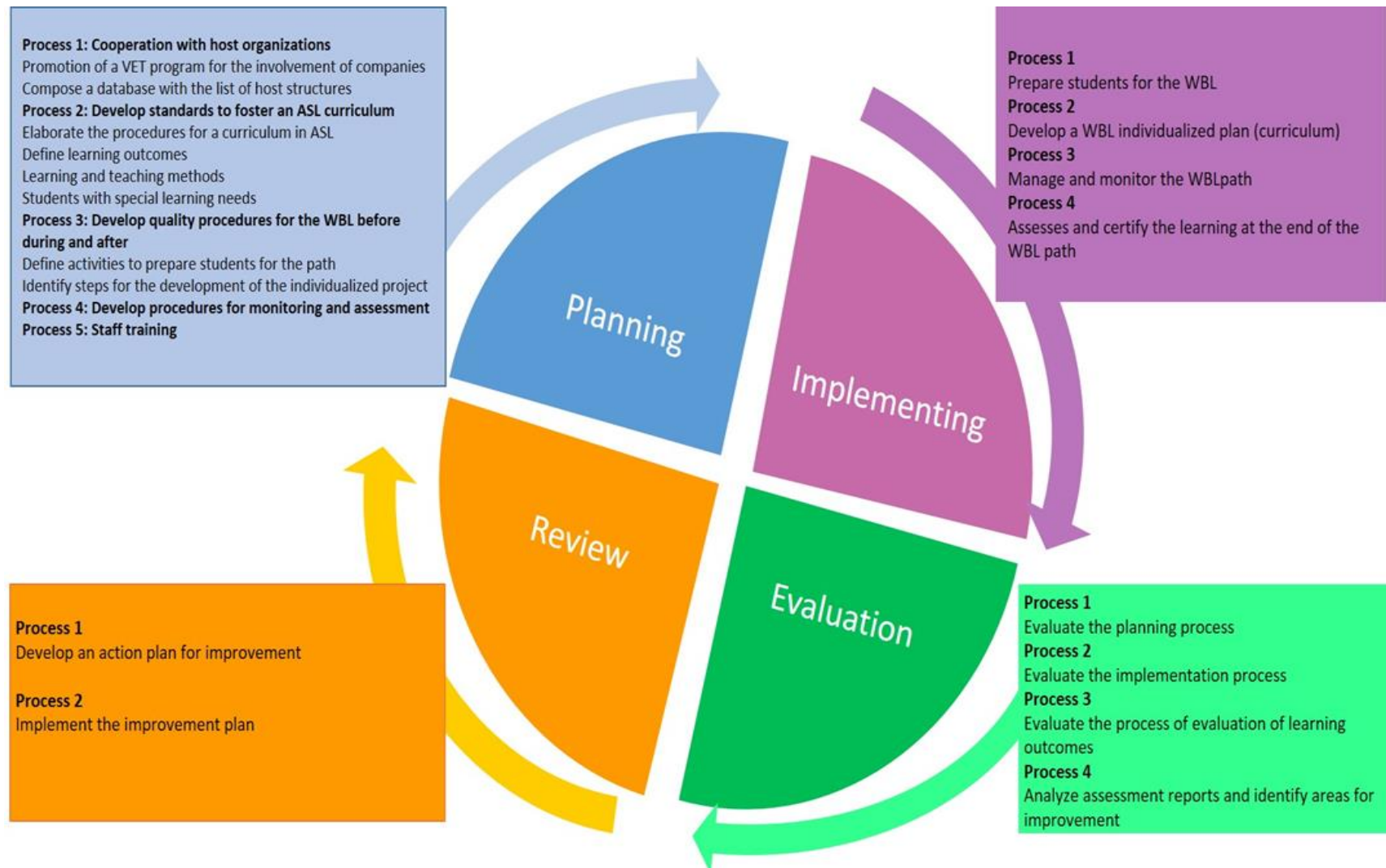
- 1) Planning
- 2) Implementation (including evaluation and certification of student learning outcomes)
- 3) Evaluation of the processes (from the cooperation with the host subjects to the evaluation of the learnings of the students)
- 4) Review

Below, in graphic form, the **four phases** of the Model used are specified.



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Graphic form: the **four phases** of the Model

Chapter 1: The processes

The development of the model led to the systematization and standardization of the processes for the creation of WBL paths.

Not all the processes identified were mapped and described through flow charts; the ones considered priority were selected during the start-up phase of the model.

The selected processes are as follows:

1. Cooperation with the host subjects
2. Curriculum design
3. Monitoring and management
4. Learning assessment

The process consists of the sequence of activities carried out by the various actors involved that lead school/VET institute to produce learning.

The tools described in this toolkit are intended to be used in order to carry out these activities. Therefore, the flow charts aim at being a guidance to the realization of the proper activities or to their control.

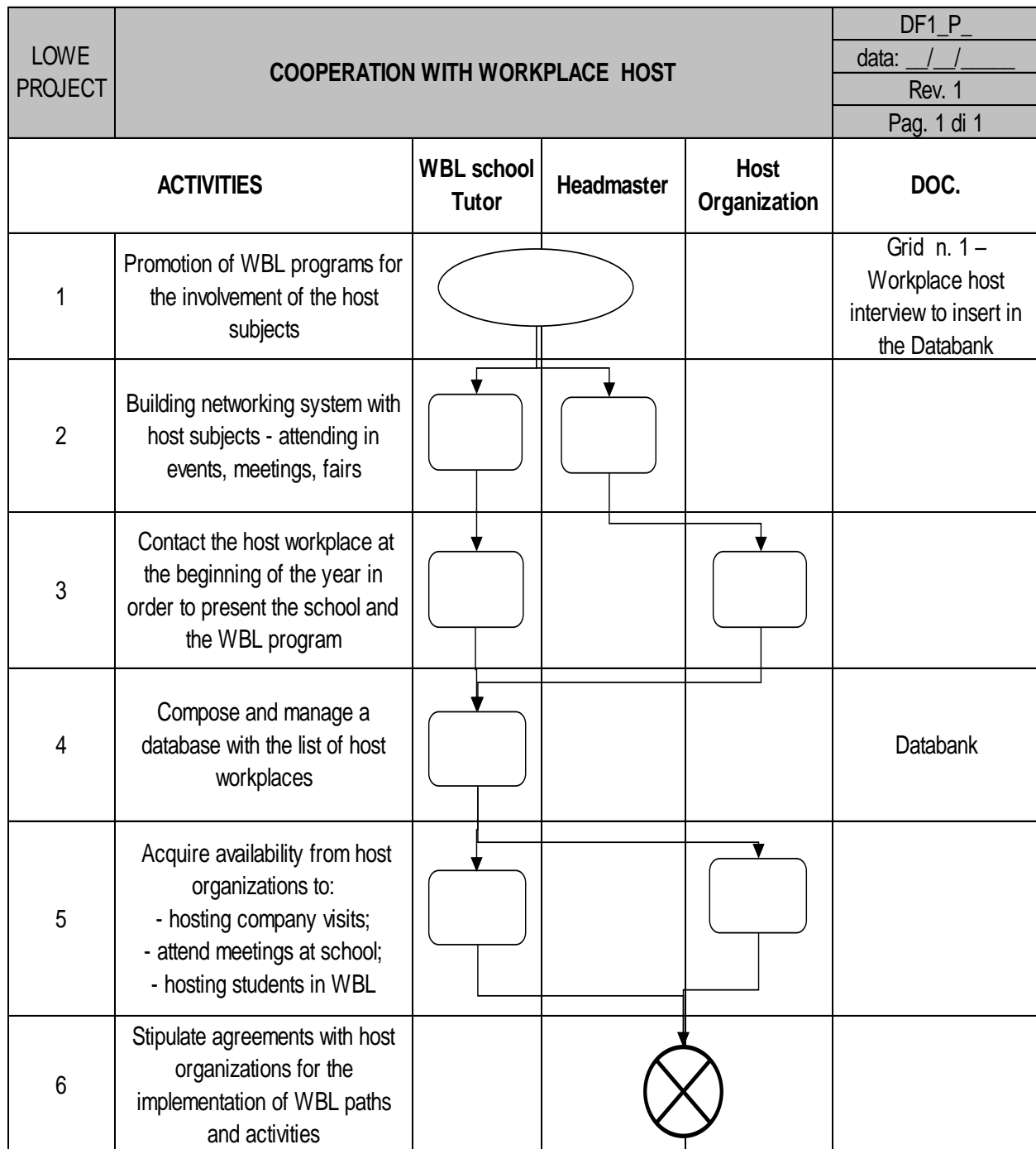
The flow charts describing the selected processes are shown below (Figure 1).





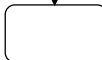

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




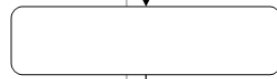


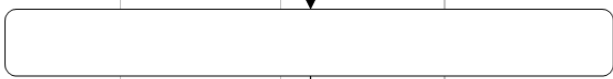




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
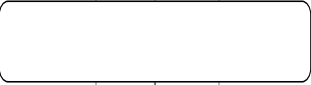





Figure 1. LOWE project flow chart





LOWE PROJECT	CURRICULUM WBL PLAN					DF1_P_	
						data: _/ _/ _	
						Rev. 1	
						Pag. 1 di 1	
ACTIVITIES		WBL SCHOOL TUTOR	WBL TEACHERS	WORKPLACE TUTOR	CLASS BOARD	STUDENT	DOC.
1	Develop a three-year WBL program						GRID n.3 - Framework three-year WBL design - 4 steps
2	Develop an annual WBL project in an interdisciplinary way starting from the learning outcomes						GRID n.2 -WBL design grid - 4 steps GUIDE n.2 – Suggestions for writing learning outcomes GUIDE n.1 – Write learning outcomes GUIDE n.3– what to avoid in the formulation of learning outcomes TAB n.1 - S.O.L.O. Taxonomy Check list n.1 - To set up the learning outcomes GRID n.5- Design grid of school subjects involved in the annual WBL project- in 4 steps GUIDE n.5 – How to write the learning outcomes of the annual WBL planning at the level of the school subjects involved
3	Develop Learning Unit(s)						GRID n.4 - Learning Unit Model GRID n.6 - Co-planning with the Workplace host GUIDE n.4 - Planning of an annual WBL Learning Unit
4	Prepare student to WBL path						GRID n.7- Talents and passions identification grid Check list n. 4 How to organize a study visit (for Workplace Tutor) GRID n.8 - Self assessment soft skills Check list n.3 How to organize a study visit (for School tutor) GRID n.9 - Testing on prevailing learning styles (Kolb test) Annex 4 -Worksheet Learning Styles Test GRID n.10 - Questions grid for the company tutor before WBL path (for STUDENT) GRID n.11 - Interview to Workplace tutor after knowing where WBL path will take place (for STUDENT)
5	Develop an individualized WBL project						GRID n.6 - Co-planning with the Workplace host GUIDE n.6 - - Process to write the individualized WBL project GRID n. 12 – Individualized plan
6	Approve individualized WBL project						7

LOWE PROJECT	MANAGEMENT AND MONITORING					DF1_P
						data: _/ _/ _
						Rev. 1
						Pag. 1 di 1
ACTIVITIES		WBL SCHOOL TUTOR	WBL TEACHERS	WORKPLACE TUTOR	STUDENT	DOC.
1	Drafting management and monitoring plan					ANNEX 4 - Monitoring Plan
2	Communication of monitoring activities to stakeholders (WBL teachers, workplace tutors, students ...)					
3	Implementation of ASL activities at school					
4	Implementation of ASL activities at workplace					
5	Formative Assessment					GRID n.15 – Give and communicate formative feedback (for school tutor and workplace tutor) GRID N.16 – Student grid to receive formative feedback
6	Data collection and information on WBL activities at school or host organization					GRID n.13 - Monitoring visit WBL workplace GRID n. 14 - WBL Activity monitoring at school
7	Update outcomes monitoring					ANNEX n. 6 – Tab. monitoring overall results
8	Possible modifications, corrections, reshaping of WBL path					
9	Reporting progress to parents					
10	Drafting final monitoring report (comment on the results)					

LOWE PROJECT	WBL LEARNING ASSESSMENT						DF1_P_
							data: _/ _/ _
							Rev. 1
							Pag. 1 di 1
	ACTIVITIES	WBL SCHOOL TUTOR	WBL TEACHERS	WORKPLACE TUTOR	CLASS BOARD	STUDENT	DOC.
1	Designing Assessment plan within the annual WBL plan						GRID n.4 - Learning Unit (dedicated section)
2	Designing Rubric for Assessment						GRID n.17 - Rubric for Assessment GRID n.18 - Assessment alignment
3	Approval of Rubric for Assessment by the host organization						GRID n.19 - Record Card for the validation by the company tutor of the designed Rubric for Assessment
5	Implementation of the summative assessment						
6	Approval of the Assessment results						GRID n. 20 - Assessment Form
7	Certification of competencies					

Chapter 2 – Planning

2.1 EMPLOYER - VET COOPERATION FOR WBL

The data bank tool (Grid 1) is the result of cooperation between the School/VET institute and the hosting companies (Intellectual Output 1). We are going in detail about setting up the database of companies and host organizations.

2.1.1 Companies and WBL sites Database setting up

Collaboration with host organizations is fundamental to start effective WBLpaths. If you do not have an efficient and populated National Platform of host subjects, you can use the elaborated worksheet database (MS Excel) in which you can find some important descriptive information of the host subjects. This database should be unique to the school/VET institute, it should not belong to the single company tutor. Web-based access should be possible.

The information present in the data bank for each host is as follows:

- Host subject name;
- Localization;
- Contact Person;
- Contact person's telephone number;
- Contact person's e-mail;
- Field of interest/learning;
- Area(s) in which the student/learner could focus on the WBL path;
- Experience in the WBL paths offer;
- Content of WBL activities;
- Prerequisites - Professional skills required;
- Regulations (age, security or other regulation);
- Date of first entry;
- Date of last update.

The digital version of the database is present in the **data bank folder**.

Grid 1. Workplace interview for data bank setting

Subject:	Address:
Contact person :	Telephone number:
Email and website:	
e.g. Economic field <input type="checkbox"/> Catering and hospitality <input type="checkbox"/> Finance and insurance <input type="checkbox"/> Public administration <input type="checkbox"/> Administration and management <input type="checkbox"/> Personal and social care <input type="checkbox"/> Real estate and rental and leasing <input type="checkbox"/> Information <input type="checkbox"/> Retail trade <input type="checkbox"/> Agriculture, forestry fishing <input type="checkbox"/> Management , support and assistance to businesses <input type="checkbox"/> Transportation and warehouse <input type="checkbox"/> Public service <input type="checkbox"/> Arts, Entertainment <input type="checkbox"/> Manufacturing <input type="checkbox"/> Wholesale <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Other:	
Student's field of interest during the WBL path	

WBL offer:	<i>(how many students, how many years)</i>		
WBL activities content	<i>(describe the activities carried out during the WBL path)</i>		
Occupational skills requested	<i>(Skills requested to start WBL)</i>		
Rules	<i>(age , safety and legal obligations)</i>		
<input type="checkbox"/> Architecture and Engineering <input type="checkbox"/> Art, Design, Entertainment, Sport, and Media <input type="checkbox"/> Construction, cleaning of the territory Maintenance <input type="checkbox"/> Business and financial transactions <input type="checkbox"/> Community and social services <input type="checkbox"/> Computer <input type="checkbox"/> Construction <input type="checkbox"/> Education, training, and libraries <input type="checkbox"/> Agriculture, fishing, and silviculture <input type="checkbox"/> Preparation of food and services <input type="checkbox"/> Practices and techniques for personal care <input type="checkbox"/> Health support <input type="checkbox"/> Installations, Maintenance, and Repairs <input type="checkbox"/> Justice <input type="checkbox"/> Social and physical sciences <input type="checkbox"/> Management <input type="checkbox"/> Support for administrations <input type="checkbox"/> Service and personal care <input type="checkbox"/> Production <input type="checkbox"/> Sales <input type="checkbox"/> Transportation and moving material			



2.2 DEVELOPING STANDARDS FOR WBL CURRICULUM (PLAN)

The design of a WBL path should be carried out:

- backward, from the fifth to the third year (last year and second two years), through the drafting of a training programme;
- annually, structured in a (macro) interdisciplinary Learning Unit.

As already indicated in the Guidelines to which this TOOLKIT is attached, the shift of the focus from learning objectives to learning outcomes represents the adoption of a student-centered approach to teaching and one of the levers for the Quality Assurance of Schools' educational provision.

In defining the WBL path, teaching strategies, learning activities and assessments should all be designed and organized to help students achieve learning outcomes. That is, WBL project should be **"constructively aligned"** so that **learning outcomes, learning experiences and assessment tasks are integrated to mutually reinforce each other and facilitate the achievement of what is planned.**

Constructive alignment is based on the converging principles of constructivism in learning, in which the student is the real protagonist of a process of constructing his own knowledge, and about the alignment both of teaching and of assessment with the expected learning outcomes.

The development of an ALIGNED training project (learning unit) implies the definition of:

- **measurable and evident learning outcomes defining competencies;**
- **adequate learning experiences to support students in achieving these learning outcomes;**
- **assessment tasks which enable students to demonstrate the achievement of these learning outcomes**

2.2.1 How to describe the learning outcomes?



Guide 1 - Writing learning outcomes

Use active verbs

You should ensure that in the formulation of learning outcomes you will use active verbs.

1. Indicate what the verb refers to, i.e. the object of the verb
2. You should provide an indication of what the knowledge, skills and competences and the type of performance are related to.
3. Complete with an indication of the context, i.e. the aim of application

Example: the student will be able to prepare (verb) the documentation (object) for monitoring the interventions (context)

NOT CORRECT: the student knows (what does "he knows" mean? How will you evaluate the "knowledge"?) The documentation procedures (the context is missing)

Example: the student will be able to plan all the operations necessary to organize the transport of goods / products

NOT CORRECT: organizational problems have been identified. The student is able to manage (how will you evaluate the management?) The organizational procedures

Example: the student will be able to create, develop and close the file / procedure of the software used for managing relationships with suppliers.

NOT CORRECT: the student will be able to manage relationships with suppliers.

Example: the student will be able to take into consideration the legislation and regulations governing cross-border trade.

NOT CORRECT: the student will be able to manage the regulations.



A useful tool to identify learning outcomes is the Structure of Observed Learning Outcomes (S.O.L.O.) which provides a systematic way to describe how a student's performance grows in complexity when mastering many tasks. It is a useful framework to create appropriate learning outcomes to the desired quantity and quality of learning in particular phases of the WBL path. S.O.L.O. Taxonomy represents learning through five levels of increasing complexity, from quantitative (the acquisition of increasing amounts of information) to qualitative (change in understanding and creation of meaning from information).

Table 1. S.O.L.O. Taxonomy

Learning levels	Learning kind features	Verbs examples to describe the learning outcomes associated with the correspondent level
Unstructural	<ul style="list-style-type: none"> • Simple connections • Focus on one aspect • Information still has little meaning 	Memorizing, identifying, recognizing, counting, defining, drawing, finding, labeling, matching, naming, quoting, remembering, reciting, ordering, telling, writing, imitating
Multi structural	<ul style="list-style-type: none"> • Some connections made • Focus on different aspects • Meta-connections (between missing connections) are treated additively • Partial disorganization of related concepts • The meaning of the parts related to the whole is missing 	Classify, combine, describe, list, report, discuss, illustrate, select, narrate, calculate, outline, put in sequence (order)
Relational	<ul style="list-style-type: none"> • Some meta-connections are made • Understanding and integration of the meaning of the parts with each other and to the whole 	To apply theory (to its domain ie to use model / procedure), integrate, analyze, argue, choose, conclude, summarize, discuss, plan, characterize, compare / compare, contrast, differentiate, organize, discuss, create a case, build, review and rewrite, examine, translate, solve a problem
Abstract Extended	<ul style="list-style-type: none"> • Connections with other information of the school subject, between school subjects, and even beyond the WBL training program • Generalization and abstraction of underlying principles and hypotheses • Transfer to new experiences and unexpected problems 	To theorize, to hypothesize, to generalize, to reflect critically, to generate, to create, to compose, to invent / to invent, to originate, to try from the pivotal principles (to experiment), to justify, to create an original case, to transfer the theory (in a new domain), to evaluate, to interpret, predict, criticize, reason.





Guide 2 - Suggestions for writing learning outcomes

The identification of learning outcomes is a process that requires effort and time. It is not immediate to write them well from the first time and it may be necessary to review them while developing teaching, learning and evaluation strategies.

Useful directions could come from students and workplace tutors:

- ✓ Does the student understand what is expected from her / him?
 - ✓ Is the company tutor clearly aware of what the student needs to demonstrate in relation to specific learning outcomes?
-
- Each learning outcome should be written on a basic level, not what you would expect from the highest possible level. The definition of the evaluation criteria and the levels of mastery should be specified in the Evaluation section.
 - Make sure that they are expressed at the appropriate level (Taxonomies are a great help).
 - Ensure that the learning outcomes refer to the overall learning outcomes of the WBL path.
 - Ask yourself if the learning outcomes can be evaluated
 - Establish which learning outcomes are essential, useful and optional.
 - Ask yourself how the teacher/ School tutor and the company tutor will know if a student has reached them, if the method and the assessment criteria are possible



Checklist 1. Setting up learning outcomes

<p>1. Is this learning outcome public and observable?</p> <p>If not, choose a different verb and repeat the question</p>	<table border="1"> <tr> <td>YES</td> <td>NOT</td> </tr> </table>	YES	NOT		
YES	NOT				
<p>2. Are you able to understand when will the learning outcome be fulfilled?</p> <p>2.1. Will the student be able to understand what to do in order to show having fulfilled his Learning outcomes?</p> <p>If this question causes confusion, chose a different verb and repeat the question</p>	<table border="1"> <tr> <td>YES</td> <td>NOT</td> </tr> <tr> <td>YES</td> <td>NOT</td> </tr> </table>	YES	NOT	YES	NOT
YES	NOT				
YES	NOT				
<p>3. Can you identify a proof/evidence of the achievement of this learning outcome?</p> <p>If you are not able to make a reliable inference, choose a different verb and repeat the question.</p>	<table border="1"> <tr> <td>YES</td> <td>NOT</td> </tr> </table>	YES	NOT		
YES	NOT				
<p>4. Can you identify behaviors and attitudes, to be associated with someone who has achieved this learning outcome?</p> <p>If these aspects are not evident in the learning outcome, choose a different verb and repeat the question.</p>	<table border="1"> <tr> <td>YES</td> <td>NOT</td> </tr> </table>	YES	NOT		
YES	NOT				



Guide 3. – What to avoid in the formulation of learning outcomes

- Evaluation criteria words such as "good" and "adequate"
- Ambiguous verbs such as "understanding", "knowing", "being aware" and "appreciating". What level of "understanding" do we mean?
- An educational jargon, as for co-planning it is necessary that both students and company tutors understand what it is meant;
- References to the process by which learning takes place, for example "undertaking a project" refers to two learning outcomes "planning a project" and "implementing a project".
- Long lists of separate learning outcomes which are just variations of the same learning outcome.
- Learning outcomes that cannot be easily assessed by referring to specific information in learning outcomes, such as particular theories and techniques. These are included as content.
- Too broad or too specific learning outcomes (they will be inaccessible).

2.2.2 Design of the WBL path, constructively aligned

The design of an WBL path should be carried out:

- backward, from the fifth to the third year (last year and the second two years), through the drafting of a training program;
- annual, structured in a (macro) Learning Unit.

In a constructively aligned WBL path, learning outcomes, learning experiences and assessment tasks are integrated to reinforce each other and facilitate the achievement of learning outcomes for one year and for three years.

The development of an ALIGNED training project implies the definition of:

- **Measurable competences**, through clear learning outcomes (LOs);
- **Learning experience** designed to help students achieve the LOs;
- **Assessment tasks** which allow students to demonstrate the achievement of the LOs.

Once the learning outcomes and the assessment tasks have been determined, the learning activities, the teaching methods and the resources necessary to achieve these learning outcomes can be planned.

Planning of an annual WBL Learning Unit in four steps

Guide 4. Planning of an annual WBL Learning Unit



STEP 1 - Definition of the learning outcomes for the WBL project

Building meaningful statements on learning outcomes will also help you design meaningful and engaging assessment tasks. If the learning outcomes are designed in such a way as to indicate what the students will have to demonstrate at the end of the WBL path, it is easier to determine assessment tasks that allow students to demonstrate their knowledge, skills, attitudes, competences.

Include low-level and high-level learning outcomes

The WBL path should include a combination of low-level, medium-level and high-level learning outcomes.

If all learning outcomes are low-level, students will not probably learn much and demotivation will grow.

If all of them are high-level, it is probably too demanding and students will not be able to learn what they need to achieve high learning outcomes.

And if they are at medium level, the WBL path is likely to be of little significance for students and for all other stakeholders (primarily company, tutor and parents).

Example

Learning outcomes:

The student will be able to:

- ✓ critically reflect (applying critical thinking) to perform an assessment of the planned intervention
- ✓ designing an individual intervention by applying knowledge of human behavior and the social environment and other multidisciplinary theoretical-methodological frameworks;



- ✓ select the appropriate intervention strategies based on the need analysis carried out;
- ✓ apply the methods and tools of multidisciplinary theoretical frameworks in the analysis of user needs;
- ✓ detect and organize users' social and health data.

STEP2: Alignment of the learning outcomes to WBL Competences and Outgoing (final)

Competences

The WBL project may take into consideration additional competences with respect to the Outgoing Profile, i.e. not explicitly identified in it.

Likewise, the WBL competences may be relevant to more than one competency of the student's Outgoing Profile.

Example

Learning outcomes:

The student will be able to:

- ✓ critically reflect (apply critical thinking) to perform an assessment of the planned intervention
- ✓ designing an individual intervention by applying knowledge of human behavior and the social environment and other multidisciplinary theoretical-methodological frameworks;
- ✓ select the appropriate intervention strategies based on the need analysis carried out;
- ✓ apply the methods and tools of multidisciplinary theoretical frameworks in the analysis of user needs;
- ✓ detect and organize users' social and health data.

In defining learning outcomes it may be useful to proceed backward along the S.O.L.O (or other Taxonomy) Taxonomy: from the highest level to the lower levels.

WBL and Citizenship competences aligned with learning outcomes: Design an intervention based on the specific social and health conditions of the users. Identify links and relationships. Acquire and interpret information.

The alignment of learning outcomes with the outgoing profile competences is functional to the use of the learning outcomes achieved in the overall assessment of learning and certification of competences. Remember that:

- ✓ each competence is defined by more than one learning outcomes;
- ✓ a learning outcome could contribute to the development of more than one competence



Outgoing profile competences aligned with learning outcomes: Use methodologies and operational tools to detect the social and health needs of the territory and contribute to prepare and implement individual projects, group and community (taken from school curriculum "Social and health services")

STEP 3: Alignment Teaching and learning activities to learning outcomes

Defining teaching activities and learning opportunities will help the students to reach each learning outcomes of the WBL path.

Example (proceeding with example taken from Step 1). In the example below we point out the learning outcomes that could be more difficult as the most complex.

Learning outcome 1:

The student will be able to:

- ✓ critically reflect (apply critical thinking) to perform an assessment of the planned intervention

Teaching and learning activities

- a) Presentation by the teacher of an individual project (real / provided by the host, or specially prepared and / or retrieved) and guided lesson focused on the following dimensions: 1) in the project presented as a case study, how was the analysis of socio-health data performed in order to transform them into information (such as theoretical approaches? which methodological steps? which tools?); 2) how was the assessment of the case-study (what was considered a priority and why? Which methods were applied? etc ..); 3) how to design the intervention (which approaches / methods /tools have been used to make an inference where, for example, a certain operating strategy and / or certain objectives have been preferred to other strategies and / or other objectives? etc.).
- b) Laboratory activity in the classroom (or WBL site) starting from the individual project developed by the students (or the student). The student is asked to elaborate a reflection sheet.



NOT CORRECT:

Frontal lesson about the evaluation of an individualized project; or what are critical thinking and its components focused on? → This is a NOT ALIGNED Teaching and learning activities to the learning outcome because it does not put the student in the condition of understanding what is meant by applied critical thinking or applying critical thinking in a learning specific context;

Inquiry-based learning done independently by the student (or group) on methodological and technical steps for the evaluation of an individualized socio-health project → Teaching and learning activities is NOT ALIGNED to the learning result because it only allows to acquire information and only on technical skills (designing a social-health intervention) but not applying critical thinking in a specific learning context

STEP4: Alignment of the assessment to Learning Outcomes

For each learning outcomes of the annual ASL path, define how the student will be assessed, which are the **assessment task and the evidences**.

The assessment task will answer the question: *will students be assessed, on what?*

The evidence will answer the questions: *what do we expect from the students as a proof/ demonstration that they have achieved that learning outcome?*

In the description of the assessment task we should make sure that it is aligned to the teaching and learning activities (if they are well aligned to the learning outcome, STEP 3, support us to guarantee a valid assessment)

Example (proceeding with example taken from Step 3)

Learning outcomes:

The student will be able to:

✓ *critically reflect (apply critical thinking) in order to perform an assessment of a planned intervention*

Teaching and learning activities

1. Guided lesson focused on key dimensions aimed at understanding the logical-cognitive process applied to specific learning contexts (social-health project) and real (or realistic).
2. Laboratory activity aimed at applying critical thinking to specific contexts (social-health project) and real (or realistic) contexts.

Assessment task

1) Reflection on the project elaborated by making explicit the performed steps (analysis, evaluation, inference) motivating the choices made.

Evidence

1) Critical reflection sheet on the project elaborated using multidisciplinary approaches

Here we can evaluate

☐ the process: reflection board (is the student able to evaluate what he has produced? Is he/she able to critically evaluate it? Can he/she explain how it's going on and why is it going on in a certain way?)

- Use of the sectoral language
- product

The definition of the assessment task represents a first essential step for the construction of the Rubric for Assessment (see below) in which we will also include the assessment criteria (i.e. the dimensions of the learning outcomes we should take into consideration) and the levels of mastery.

Below is an easy-to-use grid for the schematization of four (4) steps of the design aligned to the learning outcomes.

The annual project can also be reviewed in progress making sure, however, to maintain the alignment between the various components. The alignment, as it is evidence, represents the main aspect of the planning method presented here.



Grid 2. **WBL design grid - 4 steps** To align learning outcomes (LO), competences, learning tasks (LT), Assessment tasks (AT)

STEP 1	STEP 2	STEP 3	STEP 5
<u>WBL annual path learning:</u> At the end of the WBL annual path the students will be able to	Alignment of WBL learning outcomes to the targeted competences of the WBL and to the Outgoing competences	Teaching and learning activities	Evidences evaluation
1		1	1
2		2	2
3		3	3
etc...			

The above grid can also be used, according to framework, for the three-year programmes of the WBL path. In this case it will be sufficient to establish, backward, the learning outcomes for each year. Obviously, the framework can be used by the Class school board for the vertical alignment of the WBL path as the learning outcomes will be more extensive. It is a useful tool because the underlying logic makes more progressive and coherent not only the learning outcomes of the entire three-year program but also the related activities.



Grid 3. Framework three-year WBL design - 4 steps

For alignment learning outcomes (LO), competencies, learning tasks (LT), assessment tasks (ET)

STEP 1	STEP 2	STEP 3	STEP 4
Learning outcomes of the three-year WBL path at the end of the WBL program, The students will be able to	Alignment of WBL learning outcomes to the targeted competences of the WBL and to the Outgoing competences	Learning and teaching activities	Evidences evaluation
1	1	1	1
2	2	2	2
3	3	3	3
1	1	1	1
2 etc..	2	2	2
1	1	1	1
2 etc..	2	2	2

The learning outcomes, the competences, the learning / teaching tasks and the assessment tasks, thus aligned, will merge into the Learning Unit.



Grid 4. Learning Unit model

Learning unit	
Title	
Products	Report what the student have to create
Measurable and specific learning Outcomes	Report learning outcomes (step 1)
Targeted Competences aligned to learning outcomes - specifications of the WBL project, outgoing profile, soft skills	Report aligned competences (steps 2)
Skills	Knowledge
Specify which skills each competence is based on	Specify which knowledge each competence is based on
Target	
Prerequisites	
Application phases	Describe the structure and the main activities performed during the WBL path
Times	Describe the timing of the main activities carried out
Methodology	Report learning/teaching tasks (step 3)
Internal and external Human resources	Resources involved
Tools	Equipment, technologies, etc.
Monitoring	Plan and monitoring tools (see monitoring paragraph 3.3)
Assessment What will be assessed it has already been partly defined in the learning outcomes	Report assessment tasks step 4 and refers to steps and tools (see Assessment paragraph 3.4)

The Learning Unit, which represents the training project of the annual WBL path, should have the features of interdisciplinary, ensuring the involvement of all school subjects.

The 4-step design presented above useful to align the competences to the assessment, shouldshould be integrated to the learning / teaching tasks. It is important to specificity the school subjects which contribute in different ways to the achievement of the learning outcomes identified.

How to design the annual wbl path in interdisciplinary way?

The 4-step design presented above, whose purpose is to align the learning outcomes to the assessment, should be integrated with the specific characteristics of the school subjects. The aim is to contribute in different ways to the achievement of the learning outcomes identified.

A useful way to proceed is to integrate the annual project developed through the 4 steps presented above, with design grids in which the "contributions/addition" of the each school subject is explicitly designed to achieve the final WBL competences. Once the annual project is clear, each teacher can also proceed individually starting from that clear reference frame. In this way, the organizational difficulties and time limits, which may be linked to the interdisciplinary planning during Class board, could be overcome.

This is a FUNDAMENTAL step because it makes possible to establish how the Learning outcomes achieved will impact on the school subjects involved in terms of academic performance.

The interdisciplinary planning thus structured has the main purpose of making the teacher, ex ante, more aware of what and how he can express a structured, not extemporaneous, assessment on the student's WBL path. Likewise, the detailed design of each school subject also allows you to integrate and enrich the annual project in a continuous cycling process.

In the annual WBL project, which we summarize in a Learning Unit, teacher will not report all the learning outcomes of the each school subject but those of the overall project. Nevertheless, each teacher at the end of the course will be able to express an assessment on the aspects most closely related to his teaching, which together with aspects of the other school subjects involved, contribute to the development of learning outcomes and the skills of the annual WBL project.



Grid 5. Design grid of school subjects involved in the annual WBL project in 4 steps

STEP 1	STEP 2	STEP 3	STEP 4
Learning outcomes of the single school subjects involved in the annual WBL project	Alignment with learning outcomes and with the competences of the annual WBL project	Teaching and learning activities of the each school subject.	Assessment and Evidences
KEY QUESTION: <i>WHAT ARE THE LEARNING OUTCOMES OF THE SINGLE SCHOOL SUBJECT WITHIN THE ANNUAL WBL PROJECT?</i>	KEY QUESTIONS: <i>TO WHICH LEARNING OUTCOMES OF THE ANNUAL WBL PROJECT ARE ALIGNED? TO WHAT COMPETENCIES OF THE ANNUAL WBL PROJECT ARE ALIGNED?</i>	KEY QUESTION: <i>WHAT ARE THE TEACHING / LEARNING ACTIVITIES IN MY SCHOOL SUBJECT TO HELP STUDENTS TO ACHIEVE THE LEARNING OUTCOMES?</i>	KEY QUESTION: <i>IN MY SCHOOL SUBJECT, ON WHAT WILL THE STUDENTS BE ASSESSED? WHAT WILL I ACCEPT AS EVIDENCE OF ACHIEVED LEARNING OUTCOME?</i>
<u>School Subject A</u> At the end of the annual WBL project, students will be able to 1) .. 2) ... 3) ...	<u>School Subject A</u> The learning outcomes of my school subject are in line with the following learning outcomes and competencies of the WBL project	<u>In school subject A,</u> the teaching / learning activities that will be carried out to achieve each learning outcome are	
<u>School Subject B</u>			
<u>School Subject C, D, E</u>			

Guide questions to write the learning outcomes of the annual WBL planning at the level of the school subjects involved

Guide 5. How to write the learning outcomes of the annual WBL planning at the level of the school subjects involved

STEP 1: What are the learning outcomes of my school subject which I want students to achieve during the WBL path?

- a. All learning outcomes are important, so they should be selected on the basis of: 1) priority (indicate max 2-3); 2) relevance (i.e. in relation to the type of path outlined in the annual project).
- b. It might be useful to ask yourself: *HOW are the learning outcomes I have defined preparing students for the rest of their WBL path? And, the learning outcomes I have defined, on which learning outcomes of other school subjects are based?*
- c. To write the learning outcomes use the diagram indicated in the paragraph "*How to write the learning outcomes*".

STEP 2: the learning outcomes I have indicated for my school subject, which learning outcomes of the annual WBL project will contribute to achieve? the learning outcomes I have indicated for my school subject, which competences of the annual WBL project will contribute to achieve? In this step we should consider what is written in the annual project.

Resuming the above EXAMPLE related to the annual project learning outcomes:

At the end of the WBL path, the student will be able to:

LO 1. Critically reflect (apply critical thinking) to perform an assessment of individualized designed intervention

- ☐ **ENGLISH LANGUAGE:** *to carry out the evaluation of the intervention carried out using the micro-language of the social-health sector*
- ☐ **MATHEMATICS:** *to design quality indicators and impact indicators linked to general project objectives.*
- ☐ **GENERAL AND APPLIED PSYCHOLOGY:** *to argue on the strengths and limits of the specific psychological approach and of the method (chosen and used in the individual project elaborated) in relation to the characteristics of the target to whom it is directed and to the context.*
- ☐ **OPERATIONAL SOCIAL AND HEALTH METHODOLOGIES:** *Motivating the following: a) intervention techniques identified in the project (for the help relationship, and / or for facilitated communication, for empowerment, etc.) in relation to the specific characteristics of the user; b) design techniques used.*
- ☐ **HISTORY:** *to discuss the correlations between the main historical changes and the evolution of the theoretical-methodological approaches of the sector*

LO 2. Designing an individual intervention by applying knowledge of human behaviour and the social environment and other multidisciplinary theoretical-methodological frameworks;

- ☐ **SOCIO-HEALTH LAW AND LEGISLATION:** *apply the specific reference legislation for the drafting of an individual project consistent with the objective pursued i.e. (re) socio-*

professional insertion of an inmate / or person with mental disability / person with physical disability etc ...)

- ☐ **GENERAL AND APPLIED PSYCHOLOGY:** *planning an individual intervention taking as theoretical background at least two theoretical-methodological approaches and integrating them (constructivist approach / systemic-relational approach / Adlerian holistic approach etc ...)*
- ☐ **HYGIENE AND MEDICAL-HEALTH CULTURE:** *use methodologies and operational tools to prepare and implement individual projects*
- ☐ **OPERATIONAL SOCIAL AND HEALTH METHODOLOGIES:** *to differentiate methods and intervention techniques to be used (for the help relationship, and / or for facilitated communication, for empowerment, etc.) in relation to the specific characteristics of the user*

LO 3. Select the appropriate intervention strategies based on the need analysis carried out;

- ☐ **HYGIENE AND MEDICAL-HEALTH CULTURE:** *select tools and intervention strategies based on specific factors and dimensions related to the user's health condition*

LO 4. Apply the methods and tools of multidisciplinary theoretical frameworks in the analysis of user needs;

- ☐ **GENERAL AND APPLIED PSYCHOLOGY:** *analyze data using methods and techniques of psychological research.*
- ☐ **MATHEMATICS:** *examining / processing the data collected through statistical tools for the analysis of the data collected*

LO 5. Detect and organize users' social and health data

- ☐ **OPERATIONAL SOCIAL AND HEALTH METHODOLOGIES::** *to collect data by applying methods, tools and techniques of social and health services*

Step 3: How / through which teaching and learning activities will my school subject help to achieve each learning outcomes of the annual WBL project?

Premise that:

1) Not all the school subjects involved in the WBL project should contribute to facilitating the achievement of all the specific learning outcomes of the annual project. Some school subjects will contribute more than others to certain learning outcomes, and vice versa;

2) School subjects contribute to the achievement of the same learning outcome at different levels (ie impact less or more),

✓ ***a good way to proceed could be:***

- resume teaching / learning activities of the annual project (Step 3 of annual project grid);
- indicate in more detailed way how each school subject contributes in those activities outlined in the annual project.

This is a way to allow a valid and reliable assessment in each school subject.

In this step an example has not been reported, refer to the school subject domains and to specific teaching methods.

Step 4: In my school subject, what will I evaluate to determine if the learning outcomes have been achieved?

Once having set the learning outcomes of school subjects which contribute to the achievement of the learning outcomes of the annual WBL project, the teachers of the school subjects involved in the WBL project should identify the assessment tasks to be proposed to the students (which should be aligned with the teaching/learning opportunities).

The situation that can occur is twofold:

- the assessment task is unique for all the school subjects involved, although the evidence (of the evidence we will discuss in the specific chapter dedicated to the design of the assessment) may be different;
- the assessment task differs for some school subjects.

✓ e.g. Below of the learning outcome "reflect critically to make an assessment of the individualized designed intervention", we hypothesized:

- a single assessment task (elaboration of a reflection sheet) for 4 of the 5 school subjects involved but different evidences for its assessment;
- a different assessment task for Mathematics.

Learning outcomes of the single school subject involved in the annual WBL project	Alignment with learning outcomes and with the Competences of the annual WBL project (see annual project)	Assessment and evidence
<p>ENGLISH LANGUAGE use the specific languages of the social-health field in the evaluation of the intervention carried out</p> <p>GENERAL AND APPLIED PSYCHOLOGY: to discuss about the strengths and limits of the specific psychological approach and of the method (chosen and used in the individual project elaborated) in relation to the characteristics of the target to whom it is directed and to the context.</p> <p>OPERATIONAL SOCIAL AND HEALTH METHODOLOGIES: Motivating the following: a) intervention techniques identified in the project (for the help relationship, and / or for facilitated communication, for empowerment, etc.) in relation to the specific characteristics of the user; b) design techniques used.</p> <p>HISTORY: to correlate the main historical changes and the corresponding evolution of the theoretical-methodological approaches of the sector</p>	<p>Learning outcomes reflect critically (apply critical thinking) to perform an assessment of an individualized designed intervention</p>	<p>ENGLISH LANGUAGE; GENERAL AND APPLIED PSYCHOLOGY; OPERATIONAL METHODOLOGIES, HISTORY.</p> <p>ASSESSMENT tasks Elaboration of a Critical reflection sheet on the project using multidisciplinary approaches (in Italian and English)</p> <p>EVIDENCES: 1)Metacognition . Allows evaluating A) the ability to motivate the choices made (from the point of view of the multidisciplinary approaches in which the project is framed, the methods and tools of intervention identified in the project, the design techniques used to draft the project); B) reflection on different approaches / methods and tools.</p> <p>2)Sectoral language usage</p> <p>INDICATORS / CRITERIA: 1) Students' work will be assessed on the relevance and depth of the arguments with respect to the choices made.</p>

<p>MATHS: to design quality indicators and impact indicators linked to general project objectives.</p>	<p>2) The student's work will be evaluated on the basis of the correctness of the language used.</p> <p>MATHS ASSESSMENT TASK: Indicator grid (to be inserted in the reflection board)</p> <p>EVIDENCE: Product (grid). INDICATORS: Students' work will be assessed on the adequacy of the indicators developed to measure what they intend to measure.</p>
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Co-designing with host organization

As it is well known, the planning of the annual WBL Project should be developed with the active involvement of the host organization. In order to facilitate and to standardize the co-planning process, a grid has been created to identify:

- ✓ the main activities which the student will carry out;
- ✓ what the student will have to prove to be able to do at the end of the course;
- ✓ “translate” learning outcomes indicated by the host organization into educational standards;
- ✓ the evidence related to each learning outcome.



Grid 6. *Co-planning with the Workplace host*

SECTION 1	
Company Name:	Location:
Contact Person:	Telephone number:
Email Address:	
<p style="text-align: center;">Industry Sector</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Accommodation and Food Services </div> <div style="width: 50%;"> <input type="checkbox"/> Finance and Insurance </div> <div style="width: 50%;"> <input type="checkbox"/> Public Administration </div> <div style="width: 50%;"> <input type="checkbox"/> Administration and Management </div> <div style="width: 50%;"> <input type="checkbox"/> Health Care and Social Assistance </div> <div style="width: 50%;"> <input type="checkbox"/> Real Estate and Rental and Leasing </div> <div style="width: 50%;"> <input type="checkbox"/> Information </div> <div style="width: 50%;"> <input type="checkbox"/> Retail Trade </div> <div style="width: 50%;"> <input type="checkbox"/> Agriculture, Forestry, Fishing </div> <div style="width: 50%;"> <input type="checkbox"/> Management of Companies and Support Services </div> <div style="width: 50%;"> <input type="checkbox"/> Transportation and Warehousing </div> <div style="width: 50%;"> <input type="checkbox"/> Utilities </div> <div style="width: 50%;"> <input type="checkbox"/> Arts, Entertainment </div> <div style="width: 50%;"> <input type="checkbox"/> Manufacturing </div> <div style="width: 50%;"> <input type="checkbox"/> Wholesale Trade </div> <div style="width: 50%;"> <input type="checkbox"/> Mining </div> <div style="width: 50%;"> <input type="checkbox"/> Construction </div> <div style="width: 50%;"> <input type="checkbox"/> Others: </div> </div>	

Area(s) in which student would focus during WBL		
<input type="checkbox"/> Architecture and Engineering <input type="checkbox"/> Arts, Design, Entertainment, Sports, and Media <input type="checkbox"/> Building, Grounds Cleaning, Maintenance <input type="checkbox"/> Business and Financial Operations <input type="checkbox"/> Community and Social Services <input type="checkbox"/> Computer <input type="checkbox"/> Construction <input type="checkbox"/> Education, Training, and Library <input type="checkbox"/> Farming, Fishing, and Forestry <input type="checkbox"/> Food Preparation and Serving Related <input type="checkbox"/> Healthcare Practitioners and Technical	<input type="checkbox"/> Healthcare Support <input type="checkbox"/> Installation, Maintenance, and Repair <input type="checkbox"/> Legal <input type="checkbox"/> Life, Physical, and Social Science <input type="checkbox"/> Management <input type="checkbox"/> Office and Administrative Support <input type="checkbox"/> Personal Care and Service <input type="checkbox"/> Production <input type="checkbox"/> Sales and Related <input type="checkbox"/> Transportation and Material Moving	
SECTION 2		
<p style="text-align: center;">Content of the WBL activities:</p> <p>Indicate the main activities (3/4 no more) in which the student can be involved, what he/she has to be able to know/ to do for each activity (LEARNING OUTCOMES), what he has to produce (OUTPUT) to demonstrate it.</p>		
MAIN ACTIVITIES IN WHICH THE STUDENT WILL BE INVOLVED	LEARNING OUTCOMES	OUTPUT
Pre-requisites professional skills, knowledge and personal competences requested before WBL path starting		



Regulations	Safety and laws

Include teaching and learning methods

With regard to teaching methods and learning styles, two different training resources have been set up in order to promote a self-learning path for workplace tutors and school tutors.

The training resource addressed to the school tutors (Annex 1) is focused on two specific items

- experiential learning and teaching methods;
- conflict management.

The training resource addressed to the workplace tutors (Annex 2) is focused on three specific themes:

- learning styles and giving instructions;
- give and receive feedback;
- conflict management.

2.2.3 Develop quality procedures before, during and after the WBL

In order to implement quality procedures before, during and after the WBL path, we have prepared the following checklist with the aim of helping anyone - with a responsibility in the coordinating and in the guidance of WBL paths - to carry out the activities required.

The checklist should be used by the school tutor: every time one of the planned activities is completed, the tutor can put a check mark, insert the date and sign. This tool will also allow to check if something hasn't been carried out or has not carried out after the deadline.

Checklist 2. Quality procedures before, during and after the WBL

ACTIVITY	TICK	DATE	SIGNATURE
Before WBL Activities			
You have promoted the WBL programs for the involvement of the host subjects	<input type="checkbox"/>		
You have done networking with the host system - you have participated in events, meetings, fairs and host organizations	<input type="checkbox"/>		
You presented the school and the WBL program to the host subjects at the beginning of the year	<input type="checkbox"/>		
You have powered and manage the database with the list of host facilities	<input type="checkbox"/>		
You have acquired the availability from the host subjects to: - hosting company visits;	<input type="checkbox"/>		

ACTIVITY	TICK	DATE	SIGNATURE
- attend meetings at school; - host students			
You have stipulated agreements with the host subjects for the realization of ASL paths and activities	<input type="checkbox"/>		
You have developed a canvas of the three-year WBL project	<input type="checkbox"/>		
You have developed an annual WBL project in an interdisciplinary way starting from the learning outcomes	<input type="checkbox"/>		
You have developed one or more Learning Units starting from the learning outcomes	<input type="checkbox"/>		
During WBL activities			
You have prepared the students for the WBL path			
You have developed an individualized project starting from the learning outcomes			
The individualized project has been approved			
You have drawn up the management and monitoring plan			

ACTIVITY	TICK	DATE	SIGNATURE
You have communicated the monitoring activities to the interested parties (WBL teachers, company tutor, student ...)			
You have carried out the activities of WBL at school			
You have carried out the activities of WBL at the host organization			
You have completed the formative assessment			
You have found the data and information on WBL activity at the school or in the host office			
You have updated the monitoring results			
You have evaluated the need for modification, correction, remodulation path and, if necessary, has modified, corrected, reshaped the path			
You have reported the progress of the WBL path to the parents			
You have prepared a final monitoring report (comment on the results)			

ACTIVITY	TICK	DATE	SIGNATURE
You have defined the evaluation plan as part of the annual WBL plan			
You have built the rubric for assessment			
The Rubric for assessment has been approved by the host organization	<input type="checkbox"/>		
After WBL activities			
You have completed the summative assessment	<input type="checkbox"/>		
You have approved the results of the assessment	<input type="checkbox"/>		
You have certified the skills developed by the students	<input type="checkbox"/>		

Chapter 3 - Implementation

3.1 PREPARING THE STUDENT FOR WBL

3.1.1 Dialogue with the student

The dialogue with the student in the preparatory phase is focused on identifying his/her expectations, interests, and preferred styles of learning.

The following instrument is a Grid for conducting a dialogue aimed at identifying interests, passions and weak aspects (the student interview teacher).

The grid has been structured in three distinct sections. The first one allows you to discover the talents students believe they have, what they can do easily well, without particular efforts.

The second deals with their passion: activities that when they are carried out determine a psychological and physical well-being.

The purpose of the last section is to identify activities and areas in which the student feel to be less skilled or do not interest him/her.



Grid 7. Talents and passions identification grid

What are your strengths?
- What can you do well and easily?
- What do people usually ask you, knowing you're good at it?
- If someone asked your friend to list your talents, what would you say?
Which are your passions?
What don't you like doing?
What do you think you do not do well?

This is followed by a self-assessment exercise aimed at identifying the Soft skills of the students.

EXERCISE: "Soft skills"

Main objective: to enable students to identify their skills describing them.

Methodology: ask the student to read all the skills and experiences listed

All skills are important to consider, even the simplest and unrelated to work (for example in sports). Possibly, add other elements that arise during the discussion.

Discuss the results with the students to collect further comments, ideas,

Soft skills are the skills and abilities acquired/developed during work, courses, projects, volunteering, parenting, hobbies and sports throughout the course and areas of life. These skills can be used in a work situation.



Grid 8. Self- assessment soft skills

Competences & experiences	I have to improve	Sufficient	Good	Excellent	I'm interested in	I'm not interested in
Manual work						
I can fix things						
I can create things (I cook foods, I produce objects, etc.)						
I can use tools						
I can build things (assembly, construction, carpentry, etc.)						

Competences & experiences	I have to improve	Sufficient	Good	Excellent	I'm interested in	I'm not interested in
Creativity						
I try to do things in different ways						
I have new / original ideas						
I like trying new things						
I create things (stories, music objects)						
Communication						
I ask many questions, I'm curious, I want to learn						
I like talking to people						
I'm good at making speeches, presentations						
I'm good at writing reports / documents / communications						
I'm good at explaining things (teaching, support)						

Competences & experiences	I have to improve	Sufficient	Good	Excellent	I'm interested in	I'm not interested in
I'm good at listening to others						
Relations						
I like meeting new people						
I can work in a group						
I like helping others (cooperation)						
I'm a reliable person						
I can listen to people who have different ideas from mine						
I can accept constructive criticism						
Problem Solving						
I can identify problems						
I can identify the cause of problem						
I'm good at improving situations						
I suggest solutions						

Competences & experiences	I have to improve	Sufficient	Good	Excellent	I'm interested in	I'm not interested in
I can interpret the information and communication I receive well						
Organization						
I can organize events; feasts						
I can plan activities						
I can coordinate things / events / projects						
I can manage and respect the times						
I respect deadlines						
Leadership						
People ask me for advice / help						
I start new activities						
I have managed children, seniors, groups of people						
I take decisions						
I love being the first to try something						

Once the student has completed the grid, it should be read by taking into account the following steps:



- Identify all the skills the student has evaluated of his own interest (from right to left penultimate column)
- Focus on the skills reported as "I have to improve" or "sufficient"; these indicate skills gaps to be filled in relation to specific expressed interest;
- Then focus on the skills reported as "good" or "excellent" give information about any prerequisites or requests formulated by the host organization

EXERCISE: Self-assessment of learning styles

Each person develops certain attitudes rather than others based on past experience and the demands of the environment. In this way learning styles are developed emphasizing some skills over others.

Four learning styles have been identified:

- **DIVERGENT** = *Concreteness + Reflection*
- **ASSIMILATORY** = *Abstraction + Reflection*
- **CONVERGENT** = *Abstraction + Action*
- **ADAPTIVE** = *Concreteness + Action*

Grid 9. Testing on prevailing Learning Styles (Kolb test)

	EC		OR		CA		SA	
1	Try to find the differences		I proceed by hypotheses and attempts		I let myself get involved		I act practically	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
2	I take the ideas of others into consideration		I dedicate myself only to the problem		I carry out analysis		I remain impartial	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
3	I rely on feelings		I make careful observations		I rely on reason		I try to understand by doing	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
4	I usually accept		I usually take risks		I evaluate pros and cons		I try to become fully conscious	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
5	Intuition is privileged		I rely on facts		I follow a logical process		I ask myself many questions	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
6	I proceed by abstraction		I examine facts		I'm a concrete person		I prefer action	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1

7	I look at today		I reflect on facts		I look at tomorrow		I keep to facts	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
8	I rely on my experience		I rely on observation		I proceed by concepts		Experimentation is privileged	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
9	I work with energy		I proceed cautiously		I proceed following my thinking		I am a responsible person	
	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1	chose from 1 to 4	1
	6		6		6		6	

(Test available Annex n. 4)

Instruction for carrying out the test of learning styles (Kolb Test):

- click on the boxes highlighted in grey and choose the value from the drop down menu,

In **Grid 9** where there are 9 groups of statements, assign to each group a value from 1 to 4 based on the following statements:

- 4 almost always characterizes your habitual way of dealing with problems and solving them
- 3 sometimes characterizes your habitual way of dealing with problems and solving them
- 2 rarely characterizes my habitual way of dealing with problems and solving them
- 1 doesn't characterize my habitual way of dealing with problems and solving them

- read your corresponding profile in the two blue squares with the highest score.

EC + OR = DIVERGENT style:

Those who possess this style of learning show an orientation towards the Concrete Experience (EC) and the Reflective Observation (OR).

Divergents possess a strong capacity for imagination and the generation of ideas, a high awareness of values and meanings; they see situations from many perspectives and are able to organize the



complexity of relationships in a systemic, gestalt vision. People with this cognitive style prefer creative, multicultural activities with a strong orientation to people (i.e. artists, counselors, staff development specialists, creators and basic researchers ...).

Available resources:

- Sensitivity to concrete experience
- Careful consideration of the information
- Reflective observation
- Strong sensitivity for interpersonal relationships
- Imaginative ability and high awareness of meanings and values
- Good empathic skills, cooperation and openness

OR + CA = ASSIMILATIVE style

Those who possess this style of learning show an orientation towards the Reflective Observation (OR) and the Abstract Conceptualization (CA).

The Assimilator possesses a strong theoretical modeling ability, using an inductive process in reasoning. Cognitive orientation is more directed to ideas, to theories to the extent that they are logical and precise. This cognitive style is very effective in assimilating different observations into integrated explanations (i.e. scientists, product research and development specialists, mathematicians ...).

Available resources:

- Reflective Observation
- Abstract conceptualization
- Construction of theoretical explanatory models
- Ability to integrate the different elements from the observation into coherent explanatory models
- Approach to inductive reality
- Strong tendency to organize information
- Strong analytical skills

CA + SA = CONVERGENT style

Those who possess this style of learning show an orientation towards Abstract Conceptualization (CA) and Active Experimentation (SA).

For the Converger the reasoning processes are mostly deductive; has a great capacity for analysis, problem solving, decision making, practical application of ideas on specific problems. Convergent style prefers tasks and technical problems to emotional and social dimensions (eg applied researchers, engineers, lawyers ...). Work actively on well-defined objectives and learn by trial and errors in an environment that allows you to make mistakes without consequences.

Available resources:

- Strong results orientation
- Good capacity for abstract conceptualization
- Comparison with reality and active experimentation of ideas and theories
- Ability to focus on his own resources in order to solve a single problem
- Define and set goals
- Ability to make decisions about clear and well-defined objectives
- Ability to find functional alternatives to the solution of complex problems
- Ability to organize the information and resources available to achieve the objectives

AE + CE = ADAPTIVE style

Who owns this style of learning is strongly oriented towards Active Experimentation (AE) and Concrete Experience (CE).

This type is strongly oriented towards action, looking for opportunities and risk taking; he basically solves problems thanks to a strong intuitive ability.

The accommodating style is a winner in the management of process emergencies, in those situations where the theory does not perfectly explain the reality and should change dynamically depending on the change in environmental inputs (eg teachers, freelancers ...).

Available resources:

- Strong orientation towards objectives
- Capacity for leadership and coordination of resources
- Personal involvement and decision-making ability



- Strong skills in researching and managing new opportunities
- Ability to make decisions in relation to clear and well-defined objectives

Strong skills in organizing the information and resources available to achieve the goals



3.1.2 Contact between the student and the host subject before the start of the learning path

As it is well known, the preparatory activities are functional to increase the student's level of awareness about the learning experience that will be carried out. For the student it is a way to activate and define the learning outcomes expected. To this purpose, some useful activities are described below.

Invite the Workplace tutor in the classroom

If the workplace tutor cannot go to class, the school tutor will go to the company, take all the necessary information and bring them back to class.

Study visit to the workplace

This tool¹ is for use by the company tutor and the school tutor to organize a study visit to the workplace.

A study visit is an activity in which students have the opportunity to visit the workplace, get to know the company, meet employees, ask questions and observe work in progress. It should take place for small groups of students and it should involve preliminary preparation in the classroom, including research done by the students. All study visits should include structured activities before, during and after the experience.

¹ This tool is a reworking of the How-to Guide Workplace Tours guide contained in the Quality Work-Based Learning Toolkit document by New Century Connections, a partnership between Kansas (KCK) Public Schools and the KCK Area Chamber of Commerce.



Check list 3. How to organize a study visit (School tutor)

Before the study visit

Evaluate how the study visit can help you achieve your teaching objectives

- ✓ Make sure that the study visit will help students understand the context in which they will be challenged, acting as a valuable tool for applying academic concepts to work real situations.
- ✓ Select suitable companies for the study visit. Make sure they are appropriate organizations able to link academic learning to the world of work.
- ✓ Organize in detail the logistical part of the visit. Confirm logistics. Transport of students and any other school staff; direct contact with the persons responsible for the visit in the company; confirmation of clothing requirements
- ✓ Prepare students to best maximize their learning:
 - Discuss in class their expectations about the study visit they are about to accomplish and what they expect to learn
 - Present to students the behavioral expectations that will allow them to get the most out of this activity
 - Ask students what they already know about the company
 - Help students to do a research on the company so that during the study visit they are prepared to ask relevant questions of interest to them.
 - Ask students to prepare a list of learning questions and goals they would like to accomplish during the study visit.

It also presents students with additional material that can help them prepare for the study visit.

During the study visit

- ✓ Ensure that students receive safety instructions at the workplace.
- ✓ Organize the study visit in small groups of students. This allows students to become familiar with their guidance and maximize the likelihood that they will ask questions and engage in dialogue.
- ✓ Make sure that students come into contact with all aspects / environments of the host organization.
- ✓ Make sure that students can have meetings with employees with different levels of responsibility.

After the study visit

- ✓ Provide individual and group reflection exercises. Reflection promotes self-awareness and personal evaluation and helps students internalize learning acquired during the tour.
- ✓ Help students understand the connection between the school and the world of work.

- ✓ Assist students in writing a thank-you letter to the host company. Students' letters of thanks allow the company to better understand and evaluate its participation in the learning process. Classroom reflection activities work well as a lead-in to write thank-you notes for the host company.
- ✓ Help students understand and determine the next steps of learning their path. The study visit allows students to discover further elements for the construction of their careers.
- ✓ Use company and student feedback for continuous improvement of study visit organization

Check list n. 4 – How to organize a study visit - Workplace Tutor

Before study visit

- ✓ Give to the school tutor the main contacts for the study visit and the main logistical information
- ✓ Organization of the study visit in all its aspects / sectors / departments
- ✓ Determine a study visit structure that allows students to move in small groups
- ✓ Consider how students can talk to employees with different levels of responsibility within the company

During the study visit

- ✓ Provide all information regarding safety
- ✓ Briefly highlights the skills used in the Work and helps students understand the connection between these skills and what they learn at school

After the study visit

- ✓ Give feedback to the school tutor so the program can be improved in the future
- ✓ Stay in touch with the school tutor and with the students for the next steps
- ✓ Presents a relationship to the HR / employer for further improvement of the study visit

Interview with Workplace tutor

In the preparatory phase the student should talk directly with the company contacts or during the study visit, or when the some contacts are hosted at school, or even through autonomous contacts. The involvement of the host subjects is essential to allow the individualization of ASL projects as it allows students to orientate themselves with respect to the possible contexts in which to realize the experience

The school tutor interacts with the company tutor in the co-design phase and subsequently in the individualization phase of the ASL path.

The following is a tool that can be used by the student to gather information on the context of the host. This activity greatly increases the motivational level with which the students will face the ASL experience because it brings them closer, and therefore makes them more aware, of the dimensions and the daily practices in the specific professional context.

The tool reports a reasoned list of questions that allow you to develop a general overview of the organization in which you could carry out the WBL experience.



Grid 10. Questions grid addressed to workplace tutor before WBL path – STUDENT

Informational interview with the workplace tutor before starting the WBL path

1. What do you do during a typical work day?
2. What is the best part of your job?
3. What do you like least?
4. How did you start this work? What are career opportunities?
5. What kind of training do you need for this job?
6. What is the average salary for this job? what is the incoming salary?
7. How does technology impact your work?
8. What area of your school education do you use most to accomplish your ordinary tasks in a day's work?
9. What changes do you expect to see in this field over the next 5 years? And in the next 10?
10. How important are the following characteristics for your work?
 - ✓ Follow the instructions and orders
 - ✓ Be precise
 - ✓ Actively participate as a member of the working group
 - ✓ Know how to work independently
 - ✓ Time management
 - ✓ Ability to solve problems
 - ✓ Ability to analyze the information received
 - ✓ Being creative
11. If you had to start your career now, what would you do differently?

3.2 ELABORATION OF INDIVIDUAL WBL CURRICULUM (PLAN)

Below is the process that allows you to draw up a work-based learning project in an individualized way.

In the context of the LOWE Model, individualization refers exclusively to the internship phase in the company. In this sense, individualization will take place at the following levels:

- research by the student of a host organization or assignment by the tutor on the basis of personal characteristics;
- definition and general description by the student of the expected individual learning outcomes (two-three) following the interview with the workplace tutor; these expected learning outcomes described by the students will then be validated and brought back into the annual WBL project by the school tutor.



Guide 6 - Process to write the individualized WBL project:

- 1) To deepen the students' knowledge using their own tools and/ or those proposed in the present toolkit (see Grid n.7-Talents and passions identification grid; see Grid n.8 Exercise: Self-assessment soft skills; see Grid n.9 Testing on prevailing Learning Styles)
- 2) Resume information with respect to the workplace (see **Grid 6** -Co-planning sheet with host organization)
- 3) Implementation by the student of an interview with the company tutor (see
 1. Grid n. 11 – Interview to Workplace tutor after knowing where WBL path will take place)
- 4) Validate, refine and collect the learning outcomes to the annual WBL project by the school tutor;
- 5) Complete the individualized WBL project (see below Grid n.12- Individualized project form)

Grid 11. Interview to Workplace tutor after knowing where WBL path will take place (for student)



Before starting your experience in the company, organize a meeting with your workplace tutor to talk about the possible learning opportunities during your WBL period
● What are the tasks that I will have to accomplish during my experience?
● What is the most important thing to learn for me as soon as I start working here?
● When I finish my WBL experience here, what do you hope I will have learned/I'll be able to do?
● In your opinion what are the skills that I should necessarily develop for this position?



Grid 12. Individualized plan

<i>Name surname of the student</i>
<i>Student's Interests and passions</i>
<i>Learning style (Grid 9) and individualization methods (specifying teaching methods, supporting tools, etc.)</i>
<i>Individualized learning outcomes</i>
<i>Planned activities in the company - co-planning grid</i>
<i>Alignment of individualized learning outcomes to the learning outcomes of the annual project (optional)</i>

3.3 MANAGEMENT AND MONITORING PLAN FOR THE WBL PATH IMPLEMENTATION

The management of the WBL path involves monitoring the activities carried out, the learning outcomes achieved and the ability to manage and resolve critical issues that may occur.

A tool has been created through which each school tutor or teacher involved in the WBL can plan the process of monitoring individual paths and manage them.

The tool consists of a worksheet in Excel format attached n. 5 to the monitoring plan folder.

The images are shown below.

Annex n. 5 – Monitoring plan

Student (name and surname)			Class	You can describe the results in this way: OK in the case of positive result KO in the case of negative result							
Monitored activity 1											
Kind of detection	Information and data detected	Used tool	Times-Monitoring Date (dd/mm/yyyy) (decide the number of detection to fulfill)	Date	Result	Date	Result	Date	Result	Date	Result
Monitored activity 2											
Kind of detection	Information and data detected	Used tool	Times-Monitoring Date (dd/mm/yyyy) (decide the number of detection to fulfill)	Date	Result	Date	Result	Date	Result	Date	Result
Monitored activity 3											
Kind of detection	Information and data detected	Used tool	Times-Monitoring Date (dd/mm/yyyy) (decide the number of detection to fulfill)	Date	Result	Date	Result	Date	Result	Date	Result

The monitoring plan is developed for single students:

- 1) the activities expected in the WBL path will be monitored (Company Internship, Activities at school, School laboratory, Company visit, Entrepreneur meeting, Simulated training company, External commitment other activities)
- 2) for each activity monitored, indicate:
 - the forms of collection of data (Visit to the host organization: student observed on the task; Visit to the host organization: meeting with the student; Visit to the host organization: meeting with the workplace Tutor; Data collection from documents, Student interview; Student observation at school);
 - Data and information collected (Activity progression time, type of activity; learning progression-formative assessment; consistency of activities with the plan, difficulty)
 - Tools used (WBL Monitoring grid for visit; WBL activity detection grid)
 - Time of implementation of monitoring activities.

For monitoring activities, grids already used in schools can be used. To these can be added two of the following:



Grid 13. Monitoring visit WBL workplace grid

GUIDE: the grid can be used to check the progress of the learning path in the workplace. The school tutor verifies both the progress of Learning outcomes and the activities carried out (Tasks and activities). This monitoring activity should be done through observation or through interview addressed to the student or to the workplace tutor.

Monitoring grid visit WBL Workplace	
Coordinator teacher:	Student:
WBL tutor:	Date and time:
<input type="checkbox"/> Student observed on the task <input type="checkbox"/> Meeting with the student <input type="checkbox"/> Meeting with the WBL tutor	
Area covered by the visit	Revision and comments
Student's General Performance	
Activities and tasks	
Additional learning outcomes to be monitored in the next monitoring activity	
Further learning outcomes to be added in the WBL project	
Recommendations from the WBL school tutor	
Recommendations from students	
Feedback from the WBL workplace tutor	
Commitment in follow up	
Other activities, discussions	

Next / o survey / monitoring meeting



Grid 14. WBL Activity monitoring at School

GUIDE: the grid is used for learning activities carried out at school or in the occasion of a study visit. With this card, you can check whether, according to the sheet contained in the Learning unit, the planned activities have been carried out, if there has been a progression in learning on the basis of the 15 and 16 grids, if the activities were carried out on time

WBL activity detection grid			
Teacher coordinator:		Student:	
WBL tutor		Date and time	
<input type="checkbox"/> Activities at school <input type="checkbox"/> School laboratory <input type="checkbox"/> Company study visit, <input type="checkbox"/> Entrepreneur meeting at school <input type="checkbox"/> Simulated training company <input type="checkbox"/> -----			
	OK/NOT	Date and signature	Comments
Verification of the correctness of the activities carried out with respect to the planned (process)			
Verification of the progression of students' learning (see Formative Assessment Grids 15 and 16)			
Verification of the time progression of the activities			

When the monitoring activities have been carried out, the results should be noted. For each monitoring activity should be noted the date of implementation and a very brief judgment on the outcome (OK if positive, and NOT if negative).

These outcomes can then be reported in an overall group of students followed that allows to develop an awareness on the overall course trend. For this purpose, you can find Excel format in the Annex n. 6 -Monitoring result.



Annex 6- Monitoring Results

	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_
Student _____								
	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_
Student _____								
	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_
Student _____								
	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_
Student _____								
	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_
Student _____								
	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_	Detection result _/_/_

This is a work sheet where the results already written in the right part of the Monitoring Plan should be copied.

3.4 LEARNING OUTCOMES ASSESSMENT

The assessment process involves a planning phase and an implementation phase.

For the design of the assessment process you should use specific tools:

- Assessment plan for formative and summative assessment;
- Rubric for assessment (summative), in which to specify in detail the evidence to be assessed; the assessment criteria; the mastery levels.

Assessment plan

In the assessment plan will be reported:

1) Formative assessment

- a. times
- b. tools
- c. What will be assessed
- d. Subjects involved

The formative assessment is closely linked to the duration of the WBL project. In general, it is good practice to provide a couple of moments dedicated to formative assessment during the key steps of the WBL project.

Information detected during the formative assessment should then be included in the excel grid used for monitoring (see Annex n. 5 - monitoring plan)

observation grids can be used as tools; reflection grids for tutors and students (grid n. 15 and 16) and other tools already used by the schools.

2) Summative assessment

- a. Rubric for Assessment
- b. Assessment grid

3.4.1 Formative assessment

The formative assessment, which aims to map the progress of the learning process, provides useful information on what has already been learned and what is yet to be learned. It is functional in order to review the WBL project in light of the areas of improvement emerged. During the assessment phase, the following should be considered:

- intermediate learning outcomes of the student;
- learning process;

However, as the formative assessment is also useful for tutors to reflect on the WBL project, a specific reflection should be made on the support strategies the tutors can adopt in order to support the student's learning (*see Grids 15 and 16 below*)

The training assessment is linked to the school subjects involved in the annual WBL project. This means that even individual teachers should provide the school tutor with feedback on each of the three elements considered above (intermediate learning outcomes: process, support strategies). It could be helpful to extend the feedback sheets to all the teachers of the school subjects involved in WBL, or to ask short reports. The final result should not be scientific, but it could certainly provide the school tutor with a broader and more detailed vision of the elements to be improved.

The first grid can be used by both school and workplace tutor.

The second grid can be used by the student either in order to reflect on their own learning process, or in order to request feedback from the tutors if there are different results between the self-assessment of the student and tutors' assessment.

In other words, knowing how the student self-represents his learning path, the beliefs regarding what he has learned / has yet to learn, the self-regulation process he intends to activate to fill any gaps, allows tutors to support targeted the student and, if necessary, act in corrective function where there are inconsistencies.

Feedback will be as more effective as it is based on a knowledge of what the student believes already he has improved or he needs to improve.

Grid 15. Give and communicate formative feedback (for school tutor and workplace tutor)



Feedback levels	Questions for further information and to infer new reflection
<i>Students outcomes</i>	<ul style="list-style-type: none"> - Are the results obtained in an activity satisfying the success criteria? - Are the results of the student correct? Why yes, why not? - How did the student elaborate the contents of the product / task? - What did you appreciate about what the student did in terms of product? - Where is the error? - What did the student do better? - What knowledge does the student need in order to do better?
<i>Learning process</i>	<ul style="list-style-type: none"> - What did not he do correctly and why? - What information, contained in the delivery, did not he examine? - What strategies did he you use? - What justifies the correctness of a job? - What explanations should be given to justify the correctness of a job? - What should the student wonder to understand how to do a proper job? - What relationships are there between the different parts of the task? - What is the level of understanding of the concepts and knowledge related to the task?
<i>Self assessment And Self learning adjustment</i>	<ul style="list-style-type: none"> - How can the student review his work? - How can the student perform systematic checks while performing a task? - What ideas is the student making about the feedback and the indications he receives? - How can the student reflect on his / her learning? - What did the student do for ...? - What happened when ...? - What explanation can be given for ...? - What doubts does the student still have about the work to be done? - How is this task related to ...? - What do all these indications have in common? - After examining his work (the answer) what does the student think he has learned? - How has your way of thinking about the problem changed and doing the job? - Can the student teach another student? How and what ...?

Adapted from: HATTIE J., (2012). Visible learning for teachers. Maximizing impact on learning, London, Routledge, p. 129

The grid above is used by the tutors to stimulate in the student the production of very useful feedback for both them and student learning.

The form can be used by the tutor during the formative assessment sessions or at any time appropriate to promote reflection.



Grid 16. *Student grid to receive formative feedback*

Feedback levels	Questions for further information and to infer new reflection
<i>Students outcomes</i>	<ul style="list-style-type: none"> - How was it? What did I do well, what did not? - What was the goal of the job? - After this task, what will be the next step? - What goal can I give me?
<i>Learning process</i>	<ul style="list-style-type: none"> - How did I "work"? - What did I miss during the "work"? - Where and when did I lose control of what I was doing? - When didn't I lose control and how things went
<i>Self-assessment And Self adjustment of learning</i>	<ul style="list-style-type: none"> - Why did it happen? - What have I been good at and why? - Which parts of the procedure should I improve? - What additional knowledge do I need?

The grid can be used by the student accompanying the logbook:

- every day;
- every week;
- at an intermediate time;
- in a final moment.

The answers should be noted by the student in the logbook.

The documents addressed to the workplace tutor also contains a synoptic framework on learning styles which can be a useful support for planning and implementing individual teaching activities.

Table 2. Synoptic Table Learning Styles

<p>Divergent style</p> <p>Sensitivity to concrete experience Careful consideration of the information Reflective observation Strong sensitivity for interpersonal relationships Imaginative ability and high awareness of meanings and values. Good empathic skills, cooperation and openness.</p>	<p>Assimilator style</p> <p>Reflective Observation Abstract conceptualization Construction of theoretical explanatory models Ability to integrate the different elements of the observation into coherent explanatory models Approach to intuitive reality Strong tendency to organize information Strong analytical skills</p>
<p>Convergent style</p> <p>Strong results orientation Good abilities for abstract conceptualization Comparison with reality and active experimentation of ideas and theories Ability to focus resources on individual problems Define and set goals Ability to make decisions in relation to clear and well-defined objectives Ability to find functional alternatives to the solution of complex problems Ability to organize information and resources available to achieve the objectives set</p>	<p>Adaptive style / activist</p> <p>Strong orientation to the objectives Capacity for leadership and coordination of resources Personal involvement and decision-making ability Strong skills in researching and managing new opportunities Ability to make decisions in relation to clear and well-defined objectives Strong skills in organizing the information and resources available to achieve the objectives set</p>

3.4.2 Summative assessment

The approach to quality assurance, which implies defining the expected learning outcomes rather than the learning objectives, should also take into account the assessment and demonstration of the learning outcomes achieved. The assessment should be aligned with the learning outcomes and be guided by the student-centered learning concept.

The assessment criteria and the methods should be established by consulting also the workplace tutors and the students. The Rubric for assessment could always be shared with all the other subjects involved in the WBL project before it starts.

In the steps outlined so far for the development of the annual WBL project (see paragraph [2.2](#)) we have already partially addressed two aspects related to the design of the summative assessment: the assessment tasks (i.e. on what the students will be assessed) and, in general, the evidences (the proof of the learning outcomes achieved)

However, the assessment requires a specific planning aimed at drafting a Rubric for Assessment.

3.4.3 How to build a Rubric for assessment?

The designing of the Rubric for assessment includes a series of steps which go from the definition of what will be assessed to the identification of what is assessed impacts on the student's school performance.



Guide 7. How to build a Rubric for assessment

The procedural steps are as follows:

1. Establish what to assess → Evidence (product / process / metacognition / use sectoral language)
2. Decide on **assessment standards**, consisting of:
 - a. aspect/characteristics of evidence to be assess → **Indicators / evaluation criteria**
 - b. levels of mastery → **Descriptors**

3. For each indicator, establish the criteria for a performance which is unacceptable in a clear and unequivocal manner, ie fix the "**below-threshold level**".

These first three steps allow you to process the **Rubric for Assessment**

4. Build the scheme for the attribution of the level of mastery → Assessment form
5. Add the voting allocation scheme to be used and apply weightings, if necessary. Consider if:
 - a. The mark will be given for each indicator or for each evidence (analytical scheme) or overall (holistic scheme).

In this toolkit we propose a holistic approach even if the proposed evaluation form also allows an analytical evaluation, as we will see later.

- b. if the marks should also be assigned for the level below the minimum standard.
 - c. If any weighting criteria are required. The weighting criteria, in an approach based on the learning outcomes, can concern: the type of learning outcome; the evidence; the indicators measuring the evidence. For example, weighting the weight of the learning outcome means establishing a greater or lesser impact on the scholastic performance of each school subjects involved; some of which - most likely - will not intervene in the achievement of all the learning outcomes or not all at the same level. The school subjects involved in achieving more complex learning outcomes (with a greater weight), or involved in the achievement of more than one learning outcome, will be more impacted by the WBL path in terms of impact on the students' academic performance. There is no universal rule to attribute different weights to each learning outcome. But a valid criterion is the complexity of the learning outcome to be achieved (and in defining the learning outcomes we have helped ourselves, for example, with Taxonomy - in this Toolkit we propose S.O.L.O. Taxonomy - we are more facilitated to establish the level of complexity and we partially a completely arbitrary way of proceeding).
6. Assess and use the assessment results to review the planned path.

Establish what to assess: how to identify evidence of learning outcomes?

The evidence of learning outcomes consists of all those visible and manifest elements, tangible or intangible, which allow students to demonstrate the achievement of a learning outcome. The main evidences to be assessed in a WBL path are:

1. Product / service developed;
2. sectoral language used (oral or written);
3. learning process that allowed the mobilization of resources to face the assessment task
4. Metacognition or the quality of reflection on the action performed

Each learning outcomes could be assessed on each of the evidences. However, in order to avoid an overload assessment both for the teachers and for the other involved subjects, in the design phase of the assessment it will be established what is/what are the evidences to assess related to specific learning outcomes.

The evidence is closely linked both to the assessment tasks assigned by the teacher and by the company tutor and to the teaching / learning activities put in place during the course.

For *example*, taking the first (higher level) learning outcome from the learning outcomes identified above

✓ *critically reflect (apply critical thinking) to perform an assessment of the planned intervention* although the expected final product, that is the reflection board, more than the product itself, the most relevant evidence in order to establish the achievement of the specific learning outcome will concern the metacognitive aspect. In fact, we are not interested to assess the quality of the reflection sheet in its graphic aspects of correctness and/or functionality, as well as the way in which the student moves the resources necessary to carry out that task and the quality (congruity, correctness; originality, etc. ..) of the elaborated reflections. The questions we ask ourselves is: Can the student assess what he has produced? Is able he/she to assess it critically? Can you explain how it proceeds and why does it proceed in a certain way?

Instead, for example, compared to the learning result

- ✓ *"Designing an individual intervention applying multidisciplinary theoretical-methodological frameworks"*

A valid assessment considers other evidences such as, for example, the characteristics of the developed project (product) and the quality of the sectoral language used (in this case, written).

Decide on the dimensions that should be present in high quality learning: assessment standards

It is through the assessment standards that the learning outcomes of the student are observed in order to express a judgment on them. Assessment standards should:

- Be closely linked to learning outcomes and related evidences, describing those aspects of the evidence that will be assessed;
- indicate what is required for the transition from one level of mastery to another;
- helping students to know what they have to do and what is expected at different levels of mastery;
- be clear and understandable to all interested parties (class board; workplace tutor; students);
- be numerically manageable.

Guide questions to set assessment standards

Here are some guiding questions to set the assessment criteria:

- 1) Do they allow students to know what they need to do to achieve the intended learning outcomes?
- 2) Do they allow students to know what they need to do in order to achieve a certain level of mastery?
- 3) Does workplace tutor know what students need to do in order to assign different levels of mastery to them?
- 4) Do they guarantee a common interpretation of the assessment criteria by all the subjects involved? and can they be used by everyone involved?

3.4.4 Develop a Rubric for assessment

When developing the Rubric for assessment, it may be useful to think of the various elements within a process, which links one stage to the next.



Guide 8. How to develop a Rubric for assessment: The steps are:

- Resume the learning outcomes from the annual WBL project;
- For each learning outcome, identify the evidence in detail.
- At the class board level, establish assessment standards:
 - a. Which aspects of the students' work will be assessed in relation to the learning outcomes? →
Indicators / assessment criteria
 - b. What is the minimum level of mastery in order to establish that the assessment criterion has been reached? → minimum threshold descriptor (level 1)
 - c. What are the other levels of mastery → Descriptors (levels 2, 3, 4)
 - d. What is the level below the minimum? → "below threshold level".

Guide 9. To develop a Rubric for assessment

Learning outcomes and evidences	Assessment STANDARDS		
	Assessment criteria	Minimum threshold Descriptor	Mastery descriptors
	Which aspects of the students' work will be assessed in relation to the learning outcomes	What is the minimum level of mastery	Description of what the student should do to reach a specific level of mastery

Key question: What evidence (or evidences) will you take into account for the specific learning outcomes established in the annual WBL project?	Key question: On what basis will you assess whether student has reached a learning outcome?	Key question: What does the student has to achieve a learning outcome in order to satisfy the criterion?	Key question: How will you know which level student has arrived? (or "how well did student get there?")
--	--	---	--

The following are some of the completed grid, referring to one of the learning outcomes identified in the planning phase.

Example 1: Guidance grid for the elaboration of the Rubric for Assessment

Learning outcomes and evidences	ASSESSMENT STANDARDS		
	<i>Assessment criterion</i>	<i>Minimum threshold descriptor</i>	<i>Diversified descriptors Levels of mastery</i>
	Declaration of which aspects of the evidence will be judged, in relation to the learning outcomes		Description of what the student should do to reach a specific level with respect to the assessment criterion
Key question: What evidence (or evidence) will you take into account for the specific learning outcome?	Key question: On what basis will you evaluate if student has fulfilled the LO?	Key question: What does the student have to do to achieve that learning outcome?	Key question: How will you know which level student has reached?
<i>the student will be able to</i> detect and organize users' social and	Students' work will be assessed on the <i>completeness</i> of the data collected and on	At a basic level, the student will detect the main socio-health data	In order to achieve level 4/3/2/1 The student will be able to ...

<p>health data (taken from examples above)</p> <p>Evidence: Report / data card detected (PRODUCT)</p>	<p><i>the relevance</i> of the data selected /organized for their needs.</p>	<p>and select the most relevant for their needs</p>	<p>4) detect a wide range of socio-health data, identifying the appropriateness for their needs. Organize the data and justify its selection, explaining the reasons for its choices.</p> <p>3) detect a wide range of data and select the most relevant ones, clearly identifying their needs</p> <p>2) detect some data and select the most relevant ones, according to your needs.</p> <p>1) identify the main socio-health data and select the most relevant ones for your needs.</p> <p>Below the threshold level: Detection of limited data. Selection and organization not suitable or incorrect.</p>
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The evidence to be assessed is central in order to plan the Rubric for Assessment. For the same learning outcome we can decide to give more weight to one evidence rather than another one. This implies that there is no definite Rubric for Assessment, good for every WBL path. What is effective for a relevant, valid and reliable assessment is the method, the process by which the Rubric for Assessment is developed. This means that in the definition of the WBL the necessary times and the right attention should be dedicated to the planning of the Assessment.

Coming back to the above example, if for that same learning outcome the assessed evidence had been the PROCESS, the Rubric for Assessment would have been different (Example 2 below).

Example 2: Guidance grid for the elaboration of the Rubric for Assessment

Learning outcomes and evidences	ASSESSMENT STANDARDS		
	Assessment criterion	Minimum threshold descriptor	Diversified descriptors Levels of mastery
Key question: What evidence (or evidence) will you take into account for the specific learning outcome?	Key question: On what basis will you evaluate if the student has succeeded?	Key question: What does the student has to do to achieve a specific learning outcome?	Key question: How will you know which level the student has reached?
<p>the student will be able to detect and organize users' social and health data (taken from examples above)</p> <p>Evidence: PROCESS</p>	<p>Students' work will be evaluated on the <i>adequacy</i> of the methodological steps used for the survey; and the <i>correctness</i> in the use of detection and organization techniques of the social-health sector</p>	<p>At a basic level, the student will carry out the data collection and organization by correctly following the main methodological steps; he will use the technical basics respecting the main application criteria.</p>	<p>In order to achieve level 4/3/2/1 The student will be able to ...</p> <p>4) perform the survey by correctly following all the methodological steps; correctly use a plurality of techniques, even advanced ones, respecting the application criteria</p> <p>3) realizing the survey by correctly following all the methodological steps; use a variety of techniques respecting the application criteria</p> <p>2) perform the survey by correctly following</p>

			<p>all the methodological steps; use the main techniques respecting the application criteria 1) realizing the survey by correctly following the main methodological steps; use the basic techniques respecting the main application criteria</p> <p>Below the threshold level: Incorrect methodological steps; techniques used unsuitable or used / applied inappropriately.</p>
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It is worth stressing that:

- each learning outcome can be assessed on the basis of one or more evidences;
- or, each learning outcome will be assessed on the basis of different evidences.

The elements collected in the assessment standards designing process will flow into the Rubric for Assessment. All learning outcomes of your annual WBL project should be considered in the Rubric. Below, by way of example, follows a Rubric for Assessment set on 2 of the learning outcomes among those considered in the part of this Toolkit dedicated to the design of the annual WBL project.

3.4.5 Rubric for assessment

Grid 17. Rubric for assessment

LEARNING OUTCOMES	EVIDENCE OF LEARNING OUTCOMES	INDICATORS ASSESSMENT CRITERIA	LEVELS	DESCRIPTORS The student is able to:
Detect and organize users' social and health data	PRODUCT / card	<i>completeness of the data collected and the relevance of the data selected / organized for specific needs</i>	Level 4	To detect a wide range of socio-health data, identifying the appropriateness for their needs. Organize the data and justify its selection, explaining the reasons for its choices.
			Level 3	To detect a wide range of data and select the most relevant ones, clearly identifying their needs
			Level 2	To detect a series of data and select the most relevant ones, according to your needs.
			Level 1	To identify the main socio-health data and select the most relevant ones for your needs
			Under Threshold	Detection of limited data. Selection and organization not suitable or incorrect.
	PROCESS	<i>adequacy of the methodological steps used for the survey; and the correctness in the use of detection and organization techniques specific to the specific sector.</i>	Level 4	The student is able to: carry out the survey by correctly following all the methodological steps; correctly use a plurality of techniques, even advanced ones, respecting the application criteria
			Level 3	To carry out the survey by correctly following all the methodological steps; use a variety of techniques

LEARNING OUTCOMES	EVIDENCE OF LEARNING OUTCOMES	INDICATORS ASSESSMENT CRITERIA	LEVELS	DESCRIPTORS The student is able to:
				respecting the application criteria
			Level 2	To carry out the survey by correctly following all the methodological steps; use the main techniques respecting the application criteria
			Level 1	To carry out the survey by correctly following the main methodological steps; use the basic techniques respecting the main application criteria
			Under Threshold	Incorrect methodological steps: techniques used unsuitable or used inappropriately.
Design an individual intervention by applying knowledge of human behavior and the social environment and other multidisciplinary theoretical-methodological frameworks	PRODUCT (individualized project)	<i>Robustness of the multidisciplinary theoretical-methodological framework used; congruence between techniques and intervention tools, normative references indentured in the intervention with respect to the objectives that the same aims to achieve.</i>	Level 4	Designing an individual intervention based on a theoretical-methodological framework that integrates the approaches of a plurality of knowledge domains; in which the techniques / instruments of intervention are specifically related to each of the objectives, appropriate to their achievement,
			Level 3	Design an individual intervention based on a theoretical-methodological framework that integrates the approaches of the main knowledge domains and in which the techniques / tools of intervention are linked to the objectives and appropriate to their achievement.

LEARNING OUTCOMES	EVIDENCE OF LEARNING OUTCOMES	INDICATORS ASSESSMENT CRITERIA	LEVELS	DESCRIPTORS The student is able to:
			Level 2	Design an individual intervention based on a theoretical-methodological framework that considers the approaches of some knowledge domains without integrating them but presenting them as de-structured / summation, and where the techniques / tools of intervention are linked to the main objectives of the project and adapted to their achievement
			Level 1	Design an individual intervention based on an essential theoretical-methodological framework, and in which the techniques / tools of intervention are linked to the main objectives of the project and adapted to their achievement
			Under Threshold	Project without valid theoretical-methodological references; techniques and intervention tools contained in the project not congruent with the objectives of the project.
	Sectoral language (used in the individualized project)	Clarity and vastness (wealth) of the technical-professional sectoral language	Level 4	Use a structured language that connects all the specialized languages of the knowledge domains considered for the drafting of the project (eg: psychology, hygiene and medical health culture, social-health legislation,

LEARNING OUTCOMES	EVIDENCE OF LEARNING OUTCOMES	INDICATORS ASSESSMENT CRITERIA	LEVELS	DESCRIPTORS The student is able to:
				etc.), clear from an informative / communicative point of view in each passage
			Level 3	Use a structured language that connects specialized languages of most of the knowledge domains involved in the drafting of the project, and overall clear from an information / communication point of view
			Level 2	Use a language that connects specialized languages of some of the knowledge domains involved in the drafting of the project, and clear in the transmission of primary content and information
			Level 1	Use a basic and clear language in the transmission of primary content and information
			Under Threshold	Poor and unclear language.

Guide 9. Differentiate the descriptors of mastery levels



The articulation of the different performance levels helps to make the assessment standards evident to the students and to inform them about the characteristics on which evidence will be assessed. They also allow you to spell out what is needed, what are the requirements to move from one level to another. In this phase the students can be involved in the co-definition of the standards. This makes them much more aware of their meaning, as well as fostering in them a greater sense of "ownership" of the learning process. The formulation and clear articulation of the descriptors of the different levels of mastery, though often underestimated, represent an important moment to ensure a quality assessment.

What should be avoid

• to use:

- adjectives that represent different levels of the same concept (poor / bad / worse, good, better, better);
- undefined terms, e.g. superficial / significant work, difficulty in the application / use of ..;
- words which attribute value, e.g. excellent or poor work

These words, although they may have a meaning for those who assess, do not allow the student to understand what is the standard of assessment or what action to take in order to improve their performance. They also leave more discretion to choose both the other teachers who contribute to the assessment process and the workplace tutor.

• to introduce new criteria in the descriptors as one moves from one level of mastery to the next

• The indicators should remain the same, while the quality of indicator along the first to fourth scale can be increasingly expanded. To move through levels of mastery might be useful:

1) Increase the level of autonomy required

i.e the level of independence; the necessary decision-making process; the spirit of initiative

2) Expanding the situation / context in which learning outcomes are applied

i.e. at level 1 could be specific to the assigned assessment task, the higher levels could draw from wider experiences / sources;

3) Increase the range / number of items you expect the student knows how to use.

i.e. using a wider range of presentation techniques, combining multiple problem solving techniques, using a combination of methods / techniques / approaches for the production of product / service etc.

How does the assessment of the learning outcomes of the annual WBL project intervene on the assessment of the each school subjects involved?

The Rubric for assessment should be built at the level of the Class Board, following the process described above.

If the learning outcomes of each school subject were aligned with the general learning outcomes of the WBL project at the design stage, as suggested in this Toolkit (see planning), it will not be difficult to establish how it will impact on academic performance in different school subjects involved.

As you will observe below the steps to do are:

- resume the learning outcomes of school subject (aligned with the learning outcomes of the annual project);
- establish assessment tasks for learning outcomes;
- establish the evidences to be assessed and the indicators.

If the results of learning outcomes of school subject are aligned with the more general results of the WBL project, the situation that will occur is as follows:

- equal assessment tasks for the school subjects involved, and the same evidence to be assessed;
- equal assessment tasks for the school subjects involved and different evidences to be assessed;
- or different assessment tasks for some school subjects.

Taking back one of the learning outcomes defined above: "critically reflect to carry out an evaluation of the individualized projected intervention", we will have:

- a single assessment task (elaboration of a reflection board) for the English / Psychological / Operational Methods / History and the same evidence;
- or a different assessment task for Mathematics.

Learning Outcomes of the single school subject involved in the annual WBL project	Alignment with learning outcomes and with the competences of the annual WBL project <i>(resume annual project)</i>	Evaluation and evidence
<p>ENGLISH LANGUAGE use the specific languages of the social-health sector in the evaluation of the intervention carried out</p> <p>GENERAL AND APPLIED PSYCHOLOGY: Arguing on the strengths and limits of the specific psychological approach and the modalities of intervention (chosen and inserted in the individual project elaborated) in relation to the characteristics of the user to whom it is directed and to the intervention context.</p> <p>OPERATING METHODOLOGIES: Motivating the: - intervention techniques identified in the project (for the help relationship, and / or for facilitated communication, for empowerment, etc.) in relation to the specific characteristics of the user; - design techniques used.</p>	<p>Learning outcomes reflect critically (apply critical thinking) to perform an assessment of individualized designed intervention</p>	<p>ENGLISH LANGUAGE; GENERAL AND APPLIED PSYCHOLOGY; OPERATING METHODOLOGIES, HISTORY.</p> <p>ASSESSMENT TASK Elaboration Critical reflection sheet on the project elaborated using multidisciplinary approaches (in Italian and English)</p> <p>EVIDENCE: A) <i>Metacognition</i> B) <i>Sectoral language usage</i></p> <p>INDICATORS / CRITERIA: A) Students' work will be assessed on the relevance and depth of the arguments with respect to the choices made. B) The student's work will be evaluated on the basis of the correctness of the language used.</p>

<p>HISTORY: to correlate the main historical changes and the corresponding evolution of the theoretical-methodological approaches of the sect</p> <p>MATHS: to build indicators of quality and impact of the project related to timing, specific and general objectives.</p>		<p>MATHS:</p> <p>ASSESSMENT TASK: indicator grid (to be inserted in the reflection board)</p> <p>EVIDENCE: product (). INDICATORS: Students' work will be assessed on the adequacy of the quality indicators developed to measure what they intend to measure.</p>
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Instead for the learning outcome: "*planning an individual intervention applying the knowledge of multidisciplinary theoretical-methodological frameworks*" we will have:

- a single assessment task for all the school subjects involved and the same evidence to be assessed



Grid 18. Assessment alignment

Learning outcomes of the single school subject involved in the annual ASL project	Alignment with learning outcomes and with the competencies of the annual WBL project (<i>resume annual project</i>)	Assessment tasks and evidences	ASSESSMENT STANDARDS		
			<i>Assessment criterion</i>	<i>Minimum threshold descriptor</i>	<i>Diversified descriptors Levels of mastery</i>
<p>SOCIO-SANITARY LAW AND LEGISLATION : apply the specific reference legislation for the drafting of an individual project consistent with the objective pursued (eg (re) socio-professional insertion of an inmate / or person with mental disability / person with physical disability, etc. ...)</p> <p>GENERAL AND APPLIED PSYCHOLOGY:</p> <p>plan an individual intervention taking as</p>	<p>Learning outcomes designing an individual intervention by applying knowledge of human behavior and the social environment and other multidisciplinary theoretical-methodological frameworks</p>	<p>SOCIO-SANITARY LAW AND LEGISLATION; GENERAL AND APPLIED PSYCHOLOGY; HYGIENE E MEDICAL-HEALTH CULTURE; OPERATING METHODOLOGIES;</p> <p>BUSINESS TUTOR Evaluation task:</p> <p>Elaboration of an individual intervention project</p> <p>EVIDENCE:</p> <p>a) <i>Product (project)</i></p> <p>b) <i>Technical-professional language</i></p>	<p><i>Product</i> Students' work will be assessed on the robustness of the regulatory framework / of the theoretical-methodological / technical-instrument approaches used; congruence with respect to the project objectives;</p> <p><i>Technical-professional language</i></p>	<p><i>Product</i> At a basic level, the student plans an individual intervention based on an essential theoretical-methodological framework, and in which the techniques / tools of intervention are linked to the main objectives of the project and adapted to their achievement.</p>	<p>The levels of mastery are shown in the evaluation section</p>



<p>theoretical background at least two theoretical-methodological approaches and integrating them (constructivist approach / systemic-relational approach / Adlerian holistic approach etc ...)</p> <p>HYGIENE E</p> <p>MEDICAL-HEALTH CULTURE:</p> <p>use methodologies and operational tools for</p> <p>prepare and implement individual projects</p> <p>OPERATING METHODOLOGIES:</p>		<p>INDICATORS</p> <p>Language</p> <p><i>Clarity and wealth of the language of the sector</i></p>	<p>The student's work will be evaluated on the basis of the correctness, clarity and vastness of the language used.</p>	<p><i>Technical-professional language</i></p> <p>The student uses a basic language, and clear in the transmission of primary content and information.</p>	
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differentiate intervention methods and techniques to be used (for the help relationship, and / or for facilitated communication, for empowerment, etc.) in relation to the specific characteristics of the user					
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The elements collected in the Assessment standards designing process will flow into the Rubric for Assessment an example already reported above.

Validation of the evaluation section by the workplace tutor

Validation of the evaluation section by the workplace tutor

The quality assurance requires that in the planning phase of the assessment a time is planned in which the workplace tutor is asked to establish if the Rubric for Assessment guarantees pertinence, validity, reliability of the assessment. The involvement of the workplace tutor is aimed to assure an evaluation:

- **Relevant**, ie suitable to measure exactly those learning outcomes (that competence) and not others;
- **Valid**, when the assessment tasks and standards are considered by the workplace tutor to be able to measure that competence or assess what they should assess.
- **Reliable**, ie adequate to ensure consistency and objectivity. When the information drawn is not ambiguous and can be detected in a uniform manner by different assessors (both school and workplace tutor) according to criteria established in advance and shared.

After developing the Rubric for Assessment, whether or not it has been a shared process with the host organization, it should be viewed by workplace tutor and should receive feedback based on the pertinence, validity and reliability requirements. Below we propose a card to facilitate the acquisition of these feedbacks.

Grid 19. Record Card for the validation by the workplace tutor of the Rubric for Assessment

The Rubric for Assessment is:			
Clarity			
Very Unclear <input type="checkbox"/>	Unclear <input type="checkbox"/>	Clear <input type="checkbox"/>	Very clear <input type="checkbox"/>
Useful to identify what students need to learn			
Useless <input type="checkbox"/>	Little Useful <input type="checkbox"/>	Useful <input type="checkbox"/>	Very helpful <input type="checkbox"/>
Use to identify what we expect students to know / know how to do at the end of WBL (learning outcomes)			
Useless <input type="checkbox"/>	Little Useful <input type="checkbox"/>	Useful <input type="checkbox"/>	Very helpful <input type="checkbox"/>
Pertinent to the competence (or competencies) which it should to assess			
The assessment criteria used refer exactly to that competence and not others	The assessment criteria used refer to that competence but also to other competencies.	The assessment criteria used do not refer to that competence	
Complete			
The assessment criteria used make it possible to fully measure competence	The assessment criteria used make it possible to partially measure the competence	The assessment criteria used are not able to measure competence	
Gradual			
The different levels are clear and easily distinguishable	The different levels tend to get confused / overlapping (FOR EXAMPLE: the difference between the 1st level and the 2nd level is not clear, or between the 3rd and 4th levels)	The difference between the levels is not clear	

If there were areas for improvement, it would be advisable to review the Rubric for assessment, accepting any suggestions from the workplace tutor, and/or dedicate a moment for sharing with the workplace tutor the ways in which to read/to interpret the Rubric for assessment . This step should take place before starting the WBL project.

Assessment Form

The Assessment form is the tool on which the teachers and the workplace tutor record the learning outcomes achieved by the students and then make an average and assign a grade. In the Assessment form, which is proposed below, the central element is the learning outcome. The average of the indicator on each learning outcome is assessed. In this way:

- 1) we avoid summary assessments of school subjects which have not contributed to the achievement of a specific learning outcome (but which have contributed to the achievement of another learning outcome);
- 2) we attribute greater weight to the school subjects involved in achieving a greater number of learning outcomes;
- 3) and, if at the design stage we weighted each learning outcome by assigning it a different weight (eg based on the level of complexity), we attribute greater impact of the WBL path on those school subjects involved in the development of more complex learning outcomes (in that specific context).

For EXAMPLE, compared to our partly developed Rubric for Assessment we would have an Assessment Form as follows:

Grid 20. Assessment form

LEARNING OUTCOMES	CORRELATED EVIDENCE TO BE ASSESSED	INDICATORS (ASSESSMENT CRITERIA)	LEVELS	Workpla ce Tutor	School subject Teacher	School subject teacher	School subject teacher
Detect and organize users' social and health data	PRODUCT (detection card)	Completeness of the data collected and relevance of the data selected / organized for the specific needs	LEVEL4				
			LEVEL 3				
			LEVEL 2				
			LEVEL 1				
			Below threshol d				
	PROCESS	Adequacy of the methodologica l steps used for the survey; and correctness in the use of detection and organization techniques typical of the social-health sector	LEVEL4				
			LEVEL 3				
			LEVEL 2				
			LEVEL 1				
			Below threshol d				
Medium level of the specific learning outcome referred to the competences of the Wbl project by the individual teachers (rounding up)							
Design an individual interventio n by applying knowledge of human behavior and the social environme	PRODUCT (individualized intervention project)	Robustness of the multidisciplinar y theoretical- methodologica l framework used; congruence between techniques and intervention	LEVEL4				
			LEVEL 3				
			LEVEL 2				

nt and other multidisciplinary theoretical-methodological frameworks		tools, normative references identified in the intervention with respect to the objectives that the same aims to achieve	LEVEL 1				
			Below threshold				
	SECTORAL LANGUAGE (USED IN THE INDIVIDUALIZED PROJECT)	Sectoral language (used in the individualized project)	LEVEL4				
			LEVEL 3				
			LEVEL 2				
			LEVEL 1				
			Below threshold				
	Medium level of the specific learning outcome referred to the competences of the Wbl project (by the individual teacher- rounding up)						
	Average by school subject of all indicators for the learning outcomes considered (by the teacher) rounded up by defect or excess						
				Overall average (whole number)			

Grid 21. Skills certificate
Laws references

- Decision n.2241/2004/CE of the European Parliament and of the Suggestion of December 15 th 2004, relative to an unique community framework for the transparency of the qualifications and the competences (Europass);
- Directive n. 2005/36/CE of the European Parliament and of the Suggestion of September 7 th 2005, related to the recognition of the professional qualifications;
- Recommendation of the European Parliament and the Suggestion of December 18 th 2006, related to key competences for the permanent (2006/962/CE) learning;
- Recommendation of the European Parliament and the Suggestion of April 23 rd 2008, on the constitution of the European Picture of the qualifications for the permanent (EQF) learning;
 - Recommendation of the European Parliament and the Suggestion of June 18th 2009, on the institution of an European system of credits for the education and the professional (ECVET) formation;
- Recommendation of the European Parliament and the Suggestion of June 18 th 2009, on the institution of an European picture of reference for the guarantee of the quality of the education and the professional (EQARF) formation;
- Recommendation of the Suggestion of the European union on the validation of the formal and informal learning not of December 20 2012..

STUDENT DATA

1 SURNAME (I) *	2 NAME(I) *	
3 DATE OF BIRTH *	4 CITIZENSHIP*	
<div> <div></div> <div></div> <div></div> </div> dd mm yyyy		
5 TAX CODE*	6 TITLE OF STUDY/ STUDIES IN PROGRESS*	

School that releases the certification

7 NAME ADDRESS *	8 SCHOOL CODE*
9 NAME OF THE SCHOOL TUTOR *	10 TELEPHONE

11 ROLE/FUNCTION	12 E-MAIL	13 SEAL OR SIGNATURE *
14 HEADMASTER'S NAME *		15 TELEPHONE AND EMAIL
		16 SEAL AND SIGNATURE *

Description of the WBL path/workplace data			
17. DURATION OF THE PATH EUROPASS MOBILITY			
18	TOTAL HOURS 3RD YEAR		
19	TOTAL HOURS 4TH YEAR		
20	TOTAL HOURS 5TH YEAR		
21 WBL WORKPLACE 1 NAME AND ADDRESS*			
22. FIELD*:			
23 WORKPLACE TUTOR NAME*			24 SIGNATURE*
25 WBL WORKPLACE 2 NAME AND ADDRESS*			
26. FIELD*:			
27 WORKPLACE TUTOR NAME* *			28 SIGNATURE*

Skills acquired during the WBL path		
29 LEARNING OUTCOMES REACHED *		
LEARNING OUTCOME	MASTERY LEVEL- EQF	EQF SKILL LEVELS
1)	<input type="checkbox"/> Level 1 (STARTING) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	<input type="checkbox"/> Level 3 (Attestato di qualifica di operatore professionale) <input type="checkbox"/> Level 4 (Diploma professionale di tecnico, diploma liceale, diploma di istruzione tecnica, diploma di istruzione professionale,)
2)	<input type="checkbox"/> Level 1 (STARTING) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
3)	<input type="checkbox"/> Level 1 (STARTING) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
30 COMPETENCES ACQUIRED*		
COMPETENCES	MASTERY LEVELS- EQF	EQF LEVELS
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	<input type="checkbox"/> LEVEL 3 (CERTIFICATE OF PROFESSIONAL OPERATOR) <input type="checkbox"/> LEVEL 4 (secondary school diploma /high education)
	<input type="checkbox"/> Level 1 (STARTING) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	

	<input type="checkbox"/> Level 1 (STARTING) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
31 SOFT SKILLS	MASTERY LEVELS - EQF	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
32 DIGITAL SKILLS (BUT FOR THE PROFESSIONAL ONES)	MASTERY LEVELS - EQF	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
33 MANAGING SKILLS (BUT FOR THE PROFESSIONAL ONES)	MASTERY LEVELS - EQF	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	
34 COMMUNICATION SKILLS (BUT FOR THE PROFESSIONAL ONES)	MASTERY LEVELS - EQF	
	<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)	

		<input type="checkbox"/> Level 1 (ENTRY) <input type="checkbox"/> Level 2 (BASIC) <input type="checkbox"/> Level 3 (INTERMEDIATE) <input type="checkbox"/> Level 4 (ADVANCED)
35 OTHER SKILLS		
==		
36 DATE *	37 SCHOOL TUTOR SIGNATURE *	38 HEADMASTER'S SIGNATURE*
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <div style="border-bottom: 1px solid black; width: 20px; margin-bottom: 2px;"></div> <div style="border-bottom: 1px solid black; width: 20px; margin-bottom: 2px;"></div> <div style="border-bottom: 1px solid black; width: 20px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> DD MM YYYY </div>	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>

Final assessment

On the base of the kept behavior in firm, of the abilities of learning shown, of the competences acquired during the formative activities, of the profuse appointment, of the judgment expressed by the company tutor and by the school tutor, from the self-assessment of the student, experience is appraised with the following judgment [excellent (advanced); good (intermediate); discreet (basic); enough (entry)]_____

_____, __/__/____

The Headmaster

The school Tutor

The class coordinator
