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Development of competence in a web-based laboratory



# Instructional Design of Mobilities in Vocational Education — Background, Concepts and Experiences









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#### **LIST OF ABBREVIATIONS**

ATC Advanced Teachers' Training Concept

BMC Blended Mentoring Concept

rbcb Role based Competence Balance

LO Learning objectives

MoU Memorandum of Understanding

VET Vocational Education and Training

VO Vocational orientation

#### 1 Internships abroad – potentials, challenges and implications

The term 'mobility' within the European context has different meanings and connotations. The present contribution focusses on so-called geographical or transnational learning mobilities that offer young people the possibility of enhancing competences and personal development within VET contexts abroad. Furthermore, we focus on organized mobilities. That means that students go abroad as a part of an agreement between (at least) two involved and responsible institutions (cf. European Commission, 2012).

It seems almost normal for students in Higher Education or for employees on executive levels to spend a limited period of time abroad in order to gain intercultural competence, in-depth knowledge and expertise, and to improve their language skills (cf. Wordelmann, 2009; Teichler, 2004). However, for the group of young people belonging to the VET sector stays abroad have become more frequent, but are still far from being an integral part of VET learning pathways. Within the VET system mainly those youths take part in such projects of mobility who are doing vocational training or an apprenticeship. In this context it is important to acknowledge that some target groups of the VET system on a lower educational level (for example youth who are at a disadvantage in the marketplace receiving a training place, facing different individual and social issues etc.) for various reasons often do not take part or benefit from existing programs (cf. FROMMBERGER, 2011). Both the ability as well as the willingness of participating in organized learning mobilities is highly linked to the students' social and cultural backgrounds (OECD, 2007). Furthermore, the students' decisions to do an apprenticeship are often influenced by the openness of the company and of the overall branch regarding a stay abroad (cf. Krewerth / BÖKMANN, 2011).

Transnational mobility has become an important aspect in VET policy agendas at a European and national level (Kristensen, 2004). Initially, there are two main objectives that can be emphasized:

- Increasing the number of youth within the VET sector participating in transnational learning mobilities (quantitative perspective).
- Ensuring formal certification of the stay abroad (perspective of utilization).

As a result, many initiatives, projects and programs have spring up over the last years. Since 2014 Erasmus+ – as a program under the umbrella of the Leonardo da Vinci program – has brought together the former programs of lifelong learning, youth and sports. On closer inspections it appears that many of these projects offer a user-friendly range of possibilities to undertake mobilities: They focus on financing, organization and certification of the stays abroad.¹ In this way mobility projects seem to have become a kind of "travel service" (Heimann, 2011) rather than focusing on the individual learning process. The aspect that mobilities are undertaken seems to be paramount towards questions how mobilities are realized. This leads to the third main objective:

Assuring quality and standardization of mobilities respecting stays abroad.

This objective is pursued in different ways and is linked to certain levels of mobility: Firstly, it is important to answer questions on how to prepare the learning process in a pedagogical way. This level of the learning mobility is based on the (existing) structures of the school / institution. If the realization of mobilities emerges as a new requirement for teachers resp. the pedagogical staff, both the organizational platform has to be set or improved as well as the teachers' competences referring these organizational tasks and concerning tasks of preparation, accompaniment and reflection of the learners' stays abroad.

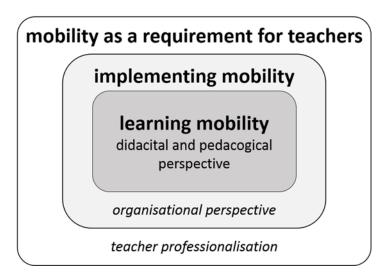


Figure 1: Levels of mobility

2

<sup>&</sup>lt;sup>1</sup> These findings are based on a comparative analysis of ERASMUS+ projects within the sector of vocational training (cf. Rüsing, 2015).

This book intends to reveal the challenges and potentials linked to mobilities as a means of personalized learning on the one hand. On the other hand, it also aims to show how the project webLab could tackle those requirements on different levels. At this point, we would like to provide a brief overview on this book:

Following this first introducing chapter, the process of mobilities is considered more precisely in chapter 2. It contains descriptions of general process conceptions and leads to a first interim conclusion. Chapter 3 focusses on criteria of quality for mobilities. This chapter results in an interim conclusion. Chapter 4 shows how the project webLab could face the revealed challenges and requirements within the context of the didactical conception of vocational internships abroad. Therefore, in a first step we describe the underlying concepts (innovations of transfer) (4.1): The role based competence balance (rbcb) and the blended mentoring concept (BMC). In the further course of the chapter the main products of the webLab project are presented (4.2): The webLab-concept in the form of a teachers' manual (4.3) and the Advanced Teachers' Training Concept (ATC) (4.4). Next to the presentation of these concepts this fourth chapter also contains practice examples and materials. The book ends with an overall conclusion in chapter 5.

#### 2 Process of the mobilities

When stays abroad are considered as instruments of learning (KIRSTENSEN, 2004) they intend to pursue specific learning goals. Within the context of transnational learning mobilities these objectives are often mentioned:

- Improving language skills,
- acquiring vocational skills,
- gaining intercultural skills, and
- promoting 'European citizenship'.

The process of mobilities are often illustrated in a phase model: Mainly they comprise (1) a phase of preparation, (2) a phase of realization, and (3) a following-up phase (cf. Wordelmann, 2009; Kristensen, 2004; European Commission, 2012; Commission of the European Communities, 2009).

Although at first sight there is a close correspondence between the appropriate conceptions of phases of mobility, there are also distinct differences. This makes it

reasonable to have a closer look at some selected conceptions (which are partially a product of analytical processes themselves).



Figure 2: Phases of learning mobilities

#### 2.1 Description of selected conceptions of mobilities

For Wordelmann (2009) the overall learning objective of internships abroad is international vocational action competence. He distinguishes the process of vocational internships abroad in the phases of (1) preparation, (2) realizing and (3) following-up. The preparation phase is outlined only roughly: It refers to 'more or less intense' preparation courses for the participants. In particular, the contact with host institutions such as the host company, school, and family is emphasized. The phase of realizing the internship abroad is described more detailed. It contains five aspects: Firstly, organizational aspects of the mobility are mentioned (financing, accommodation, language courses abroad) including the acquisition of a place at the internship company abroad. Furthermore, Wordelmann suggests developing a learning plan for the internship abroad. Another important aspect is the organization of the accompaniment by both home as well as host institutions. The students' documentation in the form of interim reports is mentioned also. In this phase it is important for Wordelmann to create and handover a job reference to the student and to document the gained language skills in the EUROPASS.

KRISTENSEN (2004) formulates four "important learning moments in the learning phase". The acquisition of vocational skills and / or improving of language and intercultural skills in general' can be seen as the overall learning objective of this conception. The first important learning moment is called placement agreement: It is to ensure that the partaking actors (project organizer, trainee, host company, mentor etc.) have achieved a clear consensus. Moreover, this placement agreement also regulates the exact nature and scope of the students' roles and tasks which – among other things – have to be in compliance with the curriculum. After these agreements, the phase of preparation is discussed: Following the

author, it is crucial to avoid the so called culture shock (discomfort and problem during the stay abroad that may affect the learning process in a negative way). Preparation has to track the quick immersion in the foreign culture. Also in this phase questions of motivating, acquiring and selecting students arise. Thus, the time of their stay has to match their ability of staying in a foreign country. At last, a proper preparation has to contain in this conception at least five aspects: (1) linguistic preparation, (2) cultural preparation, (3) vocational preparation, (4) practical preparation, and (5) psychological / mental preparation. Mentoring, monitoring and tutoring represent an own 'learning moment'. The host country is supposed to provide a mentor whereas the sending country takes over the role of supervisors (particularly for organizational matters) and provides a tutor (for example teacher of the sending school). The fourth learning moment is called the debriefing phase. For KRISTENSEN it is a vital element in the learning process. He points out that this process of reflection has to be guided by the teachers. Its results have to be made available for the students to use the gained competences and to help them finding their way in their own vocational orientation respectively.

Overall learning goal of the ECVET-process of the European Commission (2012) is to support the mobility of European citizens and to facilitate lifelong learning. Also the whole process aims at the identification, validation and recognition of gained competences. Three phases can be distinguished: In the phase before the mobility it is necessary in this concept to set up a partnership: The involved partners sign a memorandum of understanding (MoU), they identify units of learning outcomes (so called learning objectives (LO)) and discuss possibilities of assessing the agreed LO. Subsequently a learning agreement will be signed from all involved actors, including the student. During the mobility the host partner has to provide all resources and circumstances in order to allow the student to follow the learning agreement. During the stay abroad it will be assessed in the agreed way what the learner could achieve. The host partner provides evidence about the result of the learner's assessment and documents it on a transcript of record. After the mobility the validation and recognition of the learner's credit achieved abroad will take place. With regards to a following-up questions can also be answered whether or not the student can continue his / her training resp. learning pathway. The following table summarizes the analyzed concepts and provides a quick overview.

concept	overall learning objective	phases		
Wordelmann (2009)	International vocational action competence	<ul> <li>Preparation of the internship abroad:</li> <li>more or less intense preparation courses</li> <li>contacting host institutions (company, school, family etc.)</li> </ul>	<ul> <li>Realizing the internship abroad:</li> <li>facing questions of financing, accommodation, care, additional languages courses abroad</li> <li>acquisition of an internship company abroad</li> <li>agreement with the home company concerning the condition of the placement abroad</li> <li>developing a learning plan for the internship abroad</li> <li>contacting a mentor on-site in the host country</li> <li>development of an information infrastructure to ensure accompaniment also by the home institution (school, company)</li> <li>visit on-site by home institution members (esp. for longer-term internships abroad)</li> <li>the students prepare interim reports during their stay</li> </ul>	Following-up phase:

concept	overall learning objective	phases			
KRISTENSEN (2004)	Acquisition of vocational skills and / or improving of language and intercultural skills in general	Placement agreement:  ensures a clear consensus between the project organizer / trainee and the host company / mentor  documents the exact nature and scope of the trainees' role and tasks that have to be performed during the stay abroad  in compliance with the curriculum  general conditions of the placement (remuneration, working hours, health and safety, industrial injury insurance, etc.)  types of tasks and the level of responsibility expected  general description of conditions in the relevant sector in the home country of the participant  list of tasks that trainees must cope within the profession where they are training / learning	<ul> <li>Preparation:         <ul> <li>help to ensure that experiences made abroad do not turn into discomfort and thereby affect the learning process</li> <li>speeding up the process of immersion in a foreign culture</li> <li>motivating and encouraging also those youths for whom the idea of an internship abroad comes less naturally</li> <li>selecting youth and matching the time of their stay abroad with their capability of staying in a foreign country</li> <li>Five aspects of preparation proper:</li></ul></li></ul>	<ul> <li>Mentoring, monitoring and tutoring:</li> <li>as the trainee is "basically left to his or her own devices" some degree of supervision seems to be necessary "so that measures can be undertaken should a contingency arise which threatens to destabilize the learning process and which the trainee cannot deal with alone"</li> <li>Supervision and monitoring: Project organizers ensure a level of preparedness concerning problems arising during the stay, both inside and outside the placement</li> <li>Tutorship and mentoring: Accompaniment of learning in connection with the internship as a part of the host company (mentor) or as a tutor, if this function is undertaken by a person outside the host company (e.g. a teacher form the home school).</li> </ul>	The following-up or debriefing phase:  • "this phase [] is a vital element in the learning process, as this is where the experience acquired during the stay is integrated into the personality of the participant / learner"  • process of reflection that needs to be guided → some student need help in verbalizing their experiences  • assistance for the participants in order to act on the acquired competences (insights, developments)  • vocational guidance

concept	overall learning objective	phases		
ECVET Process	Supporting mobility of European citizens and facilitating lifelong learning	<ul> <li>ECVET before the mobility:</li> <li>set up a partnership</li> <li>sign a memorandum of understanding (MoU)</li> <li>identify the unit(s) of learning outcomes (LO) (= learning objectives)</li> <li>discuss assessment of LO</li> <li>clarify how LO will be validated and recognized</li> <li>sign a learning agreement</li> </ul>	<ul> <li>ECVET during the mobility:</li> <li>provide the learning activities preparing for LO identified in the learning</li> <li>agreement</li> <li>assess what LO the learner has achieved</li> <li>provide evidence of the result of the learner's assessment (including a transcript of record)</li> </ul>	<ul> <li>ECVET after the mobility:</li> <li>in line with the MoU and the learning agreement:</li> <li>validation and recognition of the learner's credits achieved abroad</li> <li>follow-up: can the mobile learners progress in their training / learning pathways as planned?</li> </ul>

Table 1: Overview of the concepts of mobility regarded

#### 2.2 Analysis and conclusions

#### 2.2.1 Analysis of the phases of preparation

The phase of preparation is represented differently in the various concepts we have considered. Wordelmann's concept for example, mentions that a preparation phase is part of the whole process, but he does not explicitly point out what this preparation should be about. The Kristensen's concept (2004) is more detailed in this regard: The preparation can focus on language, cultural and vocational aspects. It is also recommended to prepare the students for everyday life in the host country in order to prevent cultural shock. This concept emphasizes the motivation of the learner. In this respect also the question of whether the learner is capable do an internship (and if so for how long) needs to be taken into account.

All concepts emphasize the organization factor: This varies from arrangements and agreements among the sending / hosting institutions to activities of the learner, for example contacting institutions in the host country. Particularly Kristensen (2004) and the ECVET concept recommend clear structures concerning conditions, responsibilities, tasks, and roles. The ECVET concept underlines the importance of set learning goals and these again are strongly linked to possibilities of their assessment.

Overall, it seems that the leaner him-/ herself is playing only a passive role. Institutions are dealing among themselves and learning objectives emerge mostly from a curricular background. From a perspective of personalized learning in contrast, it is essential that the learner is involved in the process of goal settings and that especially individual interests and motivations are considered.

#### 2.2.2 Analysis realization phases

The analysis of these phases show first of all that the different phases of mobilities are tailored in varied ways. Accordingly, Wordelmann's phase of realization contains many aspects that were discussed previously as part of the preparation phase: In addition to the already mentioned aspects this concept recommends preparing forms of accompaniment such as a mentor on-site in the host country, an infrastructure for communication with the home institutions (school, company) and especially for long internships a visit on-site by members of the home institutions.

According to the Wordelmann concept, the students are supposed to write an interim report during their internship abroad. Towards the end they should obtain a job reference and the acquired language skills should be recorded in the EUROPASS. The second phase in the Kristensen concept emphasizes the accompaniment of the

students by forms of mentoring, monitoring and tutoring. Thereby actors from the host country play an important role and become mentors whereas interceding actors from the host country are called tutors. It remains uncertain against which background the concepts mentoring and tutoring were chosen and how these roles differ. The ECVET concept again focuses on certification: In this way it is important to provide the suitable learning environments according to the learning agreement respecting the learning objectives. It is also seen as a task to assess the learning outcomes and provide evidence about the learner's results.

Analyzing these conceptions, it seems accompanying and following the learning agreement is crucial. At the same time the internship seems to remain a kind of black-box for most teachers from the host country. Unexpected events cannot be used for further or deeper learning activations. It is also questionable whether a mentormentee relationship between the learner and a foreign person from the host country can be developed within the period of an internship. It seems to be necessary that the contact to the teacher from the home country can be maintained. In addition, periodical communication seems to be helpful.

#### 2.2.3 Analysis of following up phases

The following-up phase is mainly shaped by processes of evaluation and reflection. In particular, Kristensen emphasizes that learners might need support and guidance throughout their reflections and also need help verbalizing their experiences. For Wordelmann both forms of individual as well as group evaluation are possible. Overall, in this phase it is also an important aspect to think of ways of utilizing the competences, which have been acquired. At least it is also seen as an important aim in all of the concepts considered to use the experiences gained for vocational guidance and orientation. Characteristically for the ECVET is the validation and recognition of the competences along the learning agreement.

In addition to the importance of evaluation and reflection, in particular actions of self-assessment need to be emphasized. On the one hand, it seems to be useful to follow strictly the learning agreement. On the other hand, such competences remain unconsidered that were gathered unintentionally or not in a way that they were agreed beforehand – standardization limits flexibility.

#### 2.2.4 Interim Conclusion I

All of the discussed and analyzed concepts are helpful in order to organize and implement learning mobilities. At the same time – especially from the perspective of

personalized learning – there seem to be some difficulties and challenges, which shall be summarized in the following bullet points:

- Internships abroad have to be designed as individualized learning environments resp. as part of a personalized learning pathway.
- The learner possesses individual resources (competences, strengths, potentials) that need to be taken into account when planning the internship.
- The learner needs to be involved in the process of setting learning goals: In consequence, curricular as well as individual goals have to become part of the learning agreement concerning the internship.
- The internship abroad cannot longer be a black box for the sending teachers.
   They need to use this part of the internship as an opportunity to steer the learning process. In this concern continuous forms of communication are necessary.
- The learner has to experience him-/ herself as playing an active part in his own learning process. The support of self-regulated learning becomes important.
- It is important for the learning process that the student documents his / her experiences and reflects (vocational) situations. Therefore, consistent documentation is more helpful than a summarizing report after the actual stay abroad.
- The learner has to become a part of the assessment-process at the end of the learning process. Methods of self-assessment have to be considered. The results need to be taken into account for further development of competences and vocational orientation.
- The recognition of competences gathered are important. Next to standardized catalogues / learning agreements also competences that were gathered in informal contexts / competences that were not implicitly tracked need to be considered (informal competences).

Originating from these requirements concerning an individualized internship abroad the project webLab attempted to develop an alternative concept. It is based on two pedagogical innovations within the context of personalized learning (see chapter 4). Therefore, criteria of quality are relevant, which will be discussed and analyzed in the next chapter.

#### 3 Quality Criteria for mobilities

Criteria of quality concerning learning mobilities can be more or less implicitly found. However, it appears that these quality criteria refer to organizational matters on the one hand and aspects that refer to the learning process on the other hand. Nevertheless, these borders seem to have occasionally some overlapping, as will be shown below.

#### 3.1 Quality Criteria concerning organizational matters of mobilities

First of all, ensuring a *stable partnership between home and host institutions* seems to be indispensable (cf. European Commission, 2012). This means that a clarification of roles among the partaking actors and institutions needs to be taken into account combined with agreements and a clear allocation of responsibilities (cf. European Commission, 2012). However, it seems to be important to clarify who will actually be involved in the mobility. Apart from home and host schools, companies, parents, and further actors might have to be considered.

Of course, the supply of *information* seems to be a very important aspect. Information needs to be derived from *clear and reliable resources* (cf. European Union, 2006). In this connection the *flow of information also has to be ensured* among *all* individuals and institutions involved. The information should include

- participating persons / institutions (cf. European Commission, 2012; European Union, 2006)
- duration of the internship (cf. WORDELMANN, 2009)
- logistical aspects, such as
  - o travel arrangements,
  - o insurance,
  - o probability of government grants and loans,
  - o residence of work permits, and
  - social security(EUROPEAN UNION, 2006)

In addition to this more or less organizational information, the submission of information concerning learning objectives and contents is also crucial (cf. WORDELMANN, 2009). In this context the question arises how it can be assured that not only information is provided but also be worked through by the individuals — in particular the students — themselves in order to be able to use this information.

Another criterion that is often mentioned is the *systematic preparation of the participating students*. It is considered necessary to prepare the students both in a *linguistic as well as in a cultural way* for their stay abroad (cf. European Union, 2006; Wordelmann, 2009; Heimann, 2010; Heimann, 2011).

#### 3.2 Quality Criteria concerning the learning process in mobilities

First of all, it seems necessary to emphasize the *pedagogical approach of mobilities*, when focussing efforts on making learning in mobilities possible. This requires an understanding of mobilities as an integral part of vocational learning processes (cf. WORDELMANN, 2009).

Therefore, the *personalization respecting individualization of mobilities* is crucial and can be differentiated as follows: The respective mobility as well as its learning goals involved have to be tailored to the specific needs of the single student (cf. WORDELMANN, 2009). This means the mobility has to fit

- the individual learning pathway,
- the skills and vocational knowledge of the student,
- his / her motivation and interests, and
- aims and objectives of the student.

(cf. Wordelmann, 2009; Heimann, 2010; Heimann, 2011; European Union, 2006).

This leads to the requirement of (more or less personalized) *learning plans or agreements*, which are demanded in particular from the European perspective. These learning agreements shall be drawn up and signed by both the sending and hosting partners. The student him-/ herself should be involved in this process as far as possible. Contents pointed out in such learning agreements are (European Union, 2006; European Commission, 2012):

- Learning objectives,
- expected learning outcomes,
- means of achievement and evaluation on the set aims, and
- reintegration issues.

Along with the formulation of learning agreements, methods / forms of assessment and recognition are seen as necessary aspects to ensure a successful mobility (cf. European Commission, 2012). In addition to the learning agreement, informal context

should also be taken into account in order to make competences visible and to create another basis to document gathered skills (cf. European Union, 2006).

The importance of guidance was also emphasized in all sighted sources (cf. European Union, 2006; European Commission, 2012; Wordelmann, 2009; Heimann, 2010; Heimann, 2011). In particular, the *support and accompaniment* during the stay abroad is stressed (cf. Wordelmann, 2009; Heimann, 2010; Heimann, 2011). In this context, the concept of *mentoring* is often mentioned. In common usage, mentoring means that the hosting country should provide a person that could appear as a mentor (cf. European Union, 2006). At any rate it can be questioned whether it is possible to facilitate an effective working mentoring relationship during the limited time of an internship. In addition, mentoring is also seen as a possibility to pursue the learning agreement (European Commission, 2012).

Eventually, the **reflection** of the whole learning phase in the internship abroad is seen as an important means of assuring a successful mobility. This includes

- a personalized view on the internship together with the student (cf. WORDELMANN, 2009),
- a systematically promoted reflection of intercultural experiences (cf. Heimann, 2010; Heimann, 2011),
- a reflection whether the aims of the learning agreement have been achieved (cf. European Union, 2006) and finding reasons for deviating from it (cf. European Commission, 2012),
- to identify consequences for the individual vocational biography (EUROPEAN COMMISSION, 2012).

#### 3.3 Interim Conclusion II

In summary, three main aspects concerning the successful implementation of learning mobilities can be identified:

1) The student needs to be involved in all phases of the mobility. This includes the learning phase as well as the phase of organization. All information has to be prepared in a way that the student can handle and use the given information and learns strategies to gain further information. In particular, during their stay students need information to navigate and find their way in a foreign environment and to cope with different challenges.

- 2) Teachers (and eventually trainers) have to improve their professionalization concerning mobilities. As mentioned before this includes not only but in particular didactical competences to design relevant learning arrangements before, during and after the internship. On the other hand, they need to improve / develop competences concerning the organization of mobilities.
- 3) Along with the professionalization of teachers (and eventually trainers), also the implementing (home and hosting) institutions need to improve. In this perspective, mobilities occur also as means of organizational development. Specific structures of cooperation, information etc. are needed.

The quality criteria, which have been derived thus far, are surely not comprehensive. Nevertheless, they can build the foundation to improve the practice of mobilities. It is a further task of research and European policy to identify and verify the relevant criteria.

#### 4 Meeting the challenges: The webLab project

#### 4.1 The background to the project: Transfer of innovation

In a society that is increasingly characterized by globalization and migration, intercultural competence is a personal and professional key qualification for all young persons. Internships' abroad seem to address adequate key qualifications best. Against this background, students often have to face various challenges. It is about handling cultural differences, preparing language skills, exploring a vocational area in a foreign country as well as the organization of the mobility.

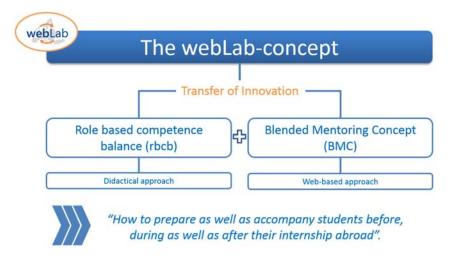
However, it is not sufficient to offer only the opportunity of staying abroad but it is also essential to illustrate systematically ways of using and integrating these contexts into one's own competence development. This requires a systematic preparation, implementation and evaluation of stays abroad. Especially in the context of stays abroad, it is necessary to find ways for reaching attendance and support of the adolescents. Here one can refer to concepts of web-based attendance of industrial internships in general. The attendance and support has to support youths to discover their own competencies and abilities and then to include them in the context of vocational training. Therefore, it is necessary to avoid having an isolated view on the stay abroad but instead to integrate it into the individual way of development. This way then also offers the opportunity of systematically developing competences in coping with 'new' media that exceed pure operator competences and enable an

appropriate behavior in an increasing mediatized world. It needs to be noted, that a continuous attendance before, during and after the stay abroad must be assured. Students should be supported concerning their vocational exploration as well as the orientation phase.

The webLab-project meets these challenges in a particular way. The project 'webLab – Development of competence in a web-based laboratory' was launched on 1 October 2013 and is promoted and financed by the European Commission. The project is carried out within the Leonardo da Vinci programme (innovation transfers) and has been scheduled to run for a period of two years till the end of September 2015. As a core objective of the project, young students should be enabled to already gain experiences abroad through a professional internship in a European partner country during their vocational education training. Additionally, with the help of webLab it shall be also able to succeed in achieving an integration of the professional internship abroad in the development process of professional action competence. Thereby, both curricular and individual learning goals shall be integrated. In addition to the realization of an internship abroad it also requires a goal-oriented preparation and post processing. It can be constituted, that a particular challenge is the students' distance from home and the way of getting along in a foreign culture. Individual support is ensured by involving a weblog. On the one hand, the young people use this web-based tool to document their internship experiences and, on the other hand, it enables teachers to manage the internship in process through individualized tasks. With this medium, it is also possible to communicate and solve problems which crop up promptly. On completion of the internship, the interns receive a recognized certificate. The teachers who are involved in the project are prepared for the media- and professional-didactic challenges of a web-based internship abroad in the context of continuing education.

However, the question arises, on what basis possible concepts can be developed. Accordingly, with regards to the webLab-project, ideas and concepts are needed which help to support accompanying students' internships' abroad and lead in the long run to a qualitative upgrading of the European mobilities in general. Against this background, two existing concepts moved to our center of interest: The role based competence balance (rbcb) and the Blended Mentoring Concept (BMC). Both concepts had initially been developed on a national level within the context of a German project. In general, both concepts seem to offer a great potential for accompanying and carrying out students' internships. Whereas the rbcb delivers a highly innovative didactical foundation, the BMC illustrates how to use weblogs as a technical means of

helping to accompany internships. On this basis, we aimed to combine these two highly innovative concepts and integrate them in an overall didactical concept that itself meets the requirements on a European level. For this, the Leonardo da Vinci programme of the European Commission provided perfect framework conditions. The following figure illustrates the connection and gives a first impression of the resulting webLab-project.



**Figure 3: Transferred Innovations** 

Before presenting the webLab-project results in detail, the two basic innovations that have been transferred are presented in the following.

#### 4.1.1 First relevant innovation: The role based competence balance (rbcb)

The role based competence balance (rbcb)<sup>2</sup> aims to use the process of vocational orientation as an anchor point for individual development and learning paths. Vocational orientation is understood as a holistic process in which exploration and orientation processes are traversed through which are then used as a foundation for informed decisions. Vocational education understood this way ends finally with a realization on the basis of a reflected and justified career aspiration or a professional plan.

Characteristic for the rbcb is an on-going strengths orientation: As a didactical principle it influences all pedagogical spheres of activities (e.g. preparation of lessons, conversations with pupils, selection of learning and development targets, individualization of tasks etc.). At the same time, the rbcb is used to improve the pupil's self-perception with the help of this learning and development process. As such the

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<sup>&</sup>lt;sup>2</sup> This concept is described in detail in Frehe / Kremer (2014) and Frehe (2015).

strength orientation is not only the pedagogical guiding thought but also the target dimension.

The rbcb facilitates a development-conductive acquisition of competences. The strict differentiation between steps of the acquisition of competences and the (accordingly tuned) processes and targets of competence development is deliberately avoided: The situation of competence acquisition itself has to be understood as a learning unit and consequently has to be didactically designed. The pupil herself / himself reveals her or his own strengths before he / she deals with the assessment of others (fellow pupils, teachers). Development-conductive acquisition of competences moves the pupil into an active position which both requires and promotes the ability for self-reflection. The target is that both pupils and teachers work together to uncover and name individual development and learning targets as well as account for and initiate learning paths.

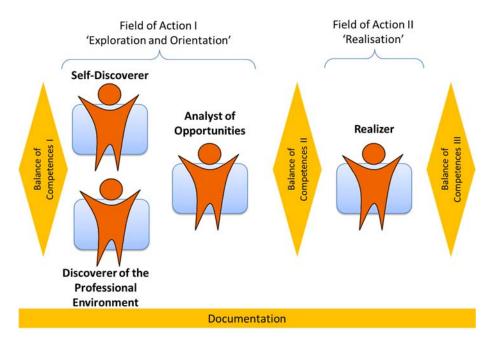


Figure 4: Framework of the role based competence balance

The concept of roles as a basis appears on the one hand as a support to establish individual strengths in the present life sphere and thereby particularly in the learners' informal contexts: Their everyday life is analyzed using the performed role, for instance 'the big sister', 'the football player', 'the cinema expert', etc. These roles are used as search criteria to draw conclusions on strengths (e. g. 'sense of responsibility', 'dependence') by the performed activities (e. g. 'to look after your little sister',).

On the other hand, roles for vocational orientation are didactically constructed: Within this process of vocational orientation appear typical situations in the so-called fields of action 'exploration and orientation' as well as 'realization'. These situations have to be

managed by the learner and will be transferred into roles of vocational orientation (VOroles). Thus, the learner will be transferred into the role of the 'self-discoverer', the 'explorer of the professional environment' and of the 'realizer', which are linked with a competence orientated profile of qualification.

Within this profile what is expected by the learner is verbalized in the relevant role (e. g. in the role of the explorer of the professional environment: use of different channels of information, reflected information research and evaluation of vocational fields, processing of information in list form, etc.).

The learner is faced with a challenge: He has to act equal to the competence profile of the VO-role. Therefore, he can apply the individual conditions / dispositions (e.g. competences, values and mental attitudes, interests and motivations, etc.) to give the particular VO-role an individual mark (for example: The internet-oriented student prefers to research with the help of online databases rather than using personal one-on-one talks with an occupational counselor of the Employment Agency).

The complete process is documented in several ways. Concerning the learning process, it is characteristic for the rbKB that material created is continually further developed and used as a method for reflection. Throughout the complete process a strengthstable documents the discovered strengths of the learners. This table is extended and changed continuously.

In addition to this accompanying documentation, there is a concluding documentation. In this concluding documentation the process of vocational orientation is documented once more and is processed again after the rbcb has been passed. For third parties (e. g. potential employers) it becomes apparent that the vocational choice occurred within the grounds of an established vocational orientation.

#### 4.1.2 Second relevant innovation: Blended Mentoring Concept (BMC)

The Blended Mentoring Concept is a mentoring-attempt combined with a social-software-application with the aim to accompany the student internship, especially during the practical phase in a company.<sup>3</sup>

Maintenance should be improved by a combination of offline and online elements. The BMC is based on the idea of blended learning and tends to connect the strength of the offline and the online support. The online support can be effected by means of

<sup>3</sup> The following text is mainly based on GOCKEL / KREMER (2013). For further information, please also see KREMER / GOCKEL (2010).

different social media services. For this excerpt, weblog has been chosen as an accompanying instrument.

With this combination of offline and online support in the context of BMC a possibility to ensure a scholar and lasting maintenance can be given without over demanding the capacities of the teachers. The blog for the internship can deliver much more information than the traditional kind of support, especially during the practical phase within a company. Teachers cannot only be updated about the level of the learners and give a quick feedback, but can also prepare their internship visits at school. This idea of a web-based practice support initializes a new, effective access to the practice world of the adolescents with the opportunity to adapt the measures of maintenance to the expectations of the adolescents. As a result, teachers have the possibility of adjusting the tasks individually for each learner. The idea for these tasks comes from the learner's weblog entries and therefore from the weblog based interaction between the teachers and the learners. Simultaneously the possibility to give a quick feedback to the already finished tasks (standard and individual tasks) arises. The individualized base of the Blended Mentoring Concept is therefore manifested by the regular interaction between teachers and learners and the individual tasks. These tasks form an adequate addition to the classical standard tasks. The learners can decide on their own if they want to invite other classmates as weblog readers, apart from the teachers. Especially this invitation of other classmates to the more or less separated area of student internship is an advantage of using the weblog. By documenting and communicating their experiences during their student internship in the weblog, learners can step out of the anonymity of this academic event and can give some advice to their classmates concerning the formation of a student internship. This possibility of inspection should rather be an inspiration for learning from and with each other and not cause unhelpful competition. This opportunity of inspection possibly leads to higher motivation and willingness to work hard on the side of the interns.

The BMC represents an individual support attempt in which learners and teachers can interact among themselves. The impulses can come from the teacher's or the learner's side. In their role as a mentor, the teachers detach from their authoritarian, knowledge mediating function and let the learners unfold themselves on their own.

On the one hand, every learner still has to fulfill standard tasks, such as describing the internship enterprise, and on the other hand, the online maintenance through weblog offers the possibility of an individual exchange, so that the teachers can formulate tasks, which are individualized and need-based.

#### 4.2 Introduction to the two basic products of the webLab-project

Within the context of the webLab-project several concepts and products have been developed. Nevertheless, the core of the project has certainly been the development of the webLab-concept and the Advanced Teachers' Training (ATC). Both the webLab-concept as well as the Advanced Training Concept (ATC) has continuously been developed within the framework of the webLab project. Therefore, the experiences from the test phases of the webLab-concept have successively flowed directly into the further development as well as into the present ATC.

In the light of the developments, which have been described in the first chapters, both products focus in general on the improvement of carrying out as well as accompanying students' mobilities. However, both products also pursue different objectives and contribute therefore to development in different ways. Whereas the former focuses a students' perspective, the latter emphasizes on the perspective of the teacher. The following figure shows the link between the two conceptual products:

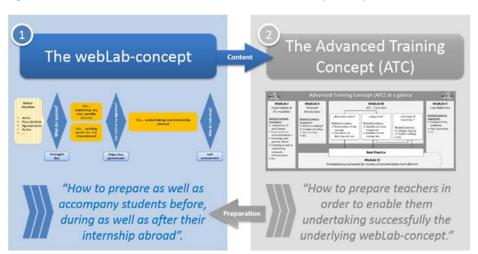


Figure 5: Links between the concepts

As one can see from the picture above, the webLab-concept aims to answer the question, how to prepare as well as accompany students before, during as well as after their internship abroad. On the other hand, the ATC focuses on how to prepare teachers in order to enable them undertaking successfully the underlying webLab-concept. In other words, the webLab-concept delivers the content of the webLab-concept, whereas the ATC offers the preparation for teachers handling the webLab-manualt. Although each product can certainly be seen individually, a close link between them therefore cannot be denied. Accordingly, it is necessary to understand that one is (rather) impossible or insufficient without the other. Both must be seen in

conjunction, i. e. in an integrated way, because they are very closely connected, in order to ensure high quality mobility processes.

The following text presents both products in detail. Possible links between the concepts are emphasized appropriately.

#### 4.3 First Main Product: The webLab-concept (teachers' manual)

#### 4.3.1 Preliminary Remarks to the webLab-concept

The webLab-concept is one of two main products, which has been developed in the framework of the webLab-project. As already mentioned before, it intends to be a didactical support tool for teachers to prepare, implement and reflect students' internships abroad. The instrument should help to include a stay abroad as an element of an overall and personalized learning process. It applies to all students within the vocational education and training system who are willing to gather both work and cultural experiences in a foreign European country within mobility projects. The whole learning process is accompanied by the use of a weblog. In this way, the students learn how to use a weblog while preparing their internship abroad in order to be acquainted with this tool before their stay abroad. Altogether, we call this instrument the webLab-concept.

At the same time, this instrument has to be seen as a framework. This means that specifications and adaptions regarding the different conditions and resources need to be carried out. However, this instrument provides an overall structure concerning the learning process. Furthermore, there is a description of each learning unit, which appoints the overall learning goal, the competences intended to be developed. Also they include suggestions for possible learning topics and methods. Additionally, there is advice how to combine each learning unit with the use of the weblog. For each learning unit there is at least one learning product that needs to be posted / uploaded in the blog (see the red exclamation mark).

The webLab-concept has been developed and implemented within the webLab-project in two waves. The experience gained regarding this process have been collected and documented systematically. As a result, the concept has been revised and best practice examples within the group of partners have been collected.

The following chapter orients itself on the development process of the webLab-concept. Initially, the problems observed and challenges regarding the didactical preparation, implementation and reflection of internships abroad are summarized.

The next step concerns the organizational considerations before the implementation. Thereafter, we first provide an overview regarding the whole webLab-concept, which is then followed by detailed descriptions of the single learning units. The following picture illustrates the guideline through this chapter:

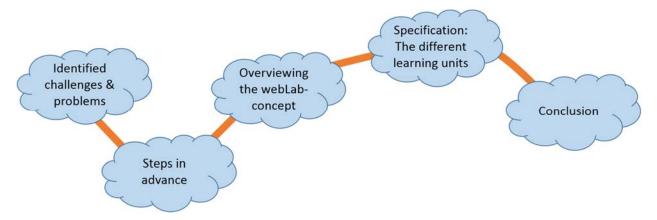


Figure 6: WebLab-concept guideline

#### 4.3.2 Main assumptions regarding the webLab-concept

As the webLab-concept focuses on a didactical perspective, several main assumptions can be identified. Based on the content of the first two chapters, the following aspects show an overview of the problems and challenges the webLab-concept needs to address to:

- 1. Staying abroad is being more and more taken for granted
- 2. We already know from regional internships that it is insufficient to just send the students to companies to gain practical experience
  - o the internship has to be prepared
  - the internship needs to be accompanied by the teachers → this occurs to be a special challenge in the context of internships abroad
- 3. Additionally, by integrating the webLab-concept we intend to understand the internship abroad as part of the personalized process of competence development
  - this means that the students have to think about the function, that the internship occupies from their individual point of view (for example vocational orientation, getting to know a foreign culture, getting to know a specific profession in a non-German environment etc.)
  - the students have to think about personalized learning objectives, which they would like to achieve in their internship

 teachers have to think about curricular useful aims in order to link the internship with learning contents in school

#### 4.3.3 Some steps in advance?

The webLab-concept relies on an existing infrastructure and experience in undertaking mobility at the school / by the teachers. Thus, the framework does not determine how to implement the webLab-concept within the context of the given day-to-day school life. To start with, teachers should therefore clarify or answer the following circumstances and questions:

- Which students take part?
  - selection / choice of particular students (very good ones, disadvantaged ones, choice as a reward for students etc.)
  - o students' internship application
  - acquiring students (announcement / advertising)
- What partners do we have? (schools, companies, both?)
- timing the mobilities (simultaneously, successively / one after the other)
- planning / scheduling mobilities in the school year (what time of the school year?)
- planning and organizing the travel (documents, travel facilities, insurance, accommodation...)
- How to include the webLab-concept in the day-to-day school life (curricular model):
  - o the whole class is preparing for internships (abroad)
  - o only selected students take part
    - in additional learning settings (before / after normal lessons)
    - offered as an intense block course (shortly) before the internship

Once these questions have been answered and the conditions have been prepared, the webLab-concept can be carried out.

#### 4.3.4 First overview on the framework of the webLab-concept

The following figure shows the framework of the webLab-concept. Overall, it describes seven learning units from the student's perspective. The learning units can be differentiated in an introducing learning unit, in three self-reflecting learning units (blue diamonds) as well as three content-orientated learning units (yellow boxes). The

learning units are linked to the overall process and its phases of preparing, realizing and reviewing the internship abroad. Furthermore, the learning units are linked to a weblog. Its use begins simultaneously with the webLab-concept. This means that the weblog is not only an instrument in terms of documentation during the stay abroad, but is already / still used in phases of preparation or reviewing the internship. For this reason, the weblog becomes an accompanying instrument throughout the whole learning process (green boxes).

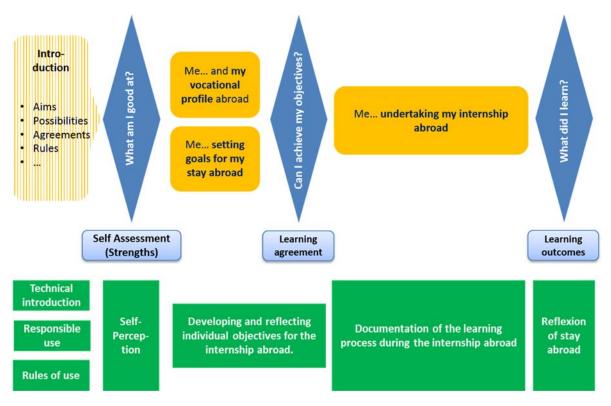


Figure 7: Framework of the webLab-concept

In the following section, the objectives of the learning units will be described in detail. Based on a rather rough tabular description of each unit the following aspects will be explored more extensively:

- competence that can be developed
- possible topics that can be considered
- possible learning methods that can be used

In addition, some advice is given how to link the learning units or learning products to the weblog. Furthermore, for every learning unit at least one good practice example from the webLab-project is given.

#### 4.3.5 The webLab-concept in detail

#### 4.3.5.1 Learning Unit 1 - Introduction



Social mega trends such as globalization and more and more flexible working environments might be far away from the students' concepts of working and occupation. Therefore, it seems important to provide some deeper insights of the individual relevance these growing trends might have for the individual student. Topics like globalization, cultural diversity, living in the EU etc. can be involved in this first learning unit and might also be important subjects for the entire learning group.



Figure 8: Learning unit 1 - Introduction in the internship abroad

During the introduction phase it is important to familiarize the students with the following main aspects at the same time:

a) The webLab-concept: Teachers have to explain the overview of the concept and tasks to the students in order to make the whole process more transparent to them. They also should emphasize that the internship itself is only one part of the webLab-concept. In this context, it is also important for the students to understand that the internship should not only be used as an incoherent

- experience abroad, but also offers them an environment to develop their competences in a purposeful way.
- b) *The stay abroad:* As a matter of course, the students also have to get accustomed to the idea of going abroad to a (foreign) country in order to work, experience and develop competences. It could be useful to let the students do some initial research on the country, area, culture, etc. they are going to visit.
- c) *The weblog:* The students have to get to know the social media format of a weblog. This means that they need to have the knowledge about the opportunities and limits of this new media format. In general, the students should be sensitized regarding the use of this media in occupational contexts. In addition, they should be able to cope with the technical infrastructure. In order to ensure regular communication during the stay abroad, some basic rules should be fixed concerning the use of the weblog beforehand:
- How often does the student have to post (once a day, every second day, once a week...)?
- How promptly do the teachers comment?
- What is supposed to be content of the posts?
- How long / short should a post be?
- What other formats of documentation are permitted or also wanted (videos, photos, links...)?

To link this first learning unit to the weblog, a first post can be created. Writing an essay or article on the topic "Working in Europe" or "How do I envisage my internship" are just some of the possibilities.

In addition, there is a wide range of possible learning methods. Depending on the number of students, discussions are conceivable as well as the individual creation of checklists. This also has to be decided with regard to the chosen topics (see above).

# Implementation of Learning Unit 1 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

Cultural differences, history of the host country Treated subjects:

Used learning method, "In order to prepare the students on cultural issues, I made them think about figures and facts about tasks etc.:

Finland." (Responsible teacher at Franz-Jürgens-Berufskolleg)

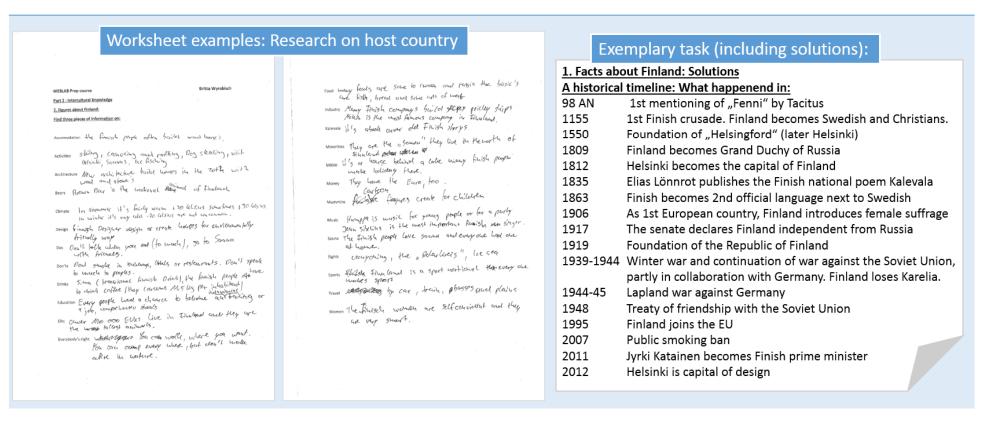


Figure 9: Example of Implementation of Learning Unit 1 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

## Implementation of Learning Unit 1 (IES Universidad Laboral, Albacete, Spain)

Treated subjects: Labor market in the host country, getting to know the host town, etc.

Used learning method, tasks etc.:

"We have designed a blog with 7 tabs. [...] And each tab contents several questions that our students have to fill in along all the period (before, during and after the internship)

A) Introduction

How can I improve my professional profile?

How can develop my profession in another language? How can I know the labor market of the host country?

How is Düsseldorf in Germany?." (Responsible teacher at IES Universidad Laboral)



Figure 10: Example of Implementation of Learning Unit 1 (IES Universidad Laboral, Albacete, Spain)

# Implementation of Learning Unit 1 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

# Treated subjects: Preparing taking pictures

Used learning method, tasks etc.:

"To support the second-flow students blogging about work-related issues we created a handbook to give them a specific 'manual' when blogging. This manual also takes care of data-protection-issues. It also helps with marking the student's blog." (Responsible teacher at Max-Weber Berufskolleg)

→ The teachers at Max-Weber-Berufskolleg encouraged their students to take pictures by using a small figure (so called "Radschläger"), which is a typical symbol for the Düsseldorf area. By doing so, it is possible to illustrate one's impressions without being part of the picture yourself. With regard to data protection issues, this seems to be a good option.



Figure 11: Example of Implementation of Learning Unit 1 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

#### 4.3.5.2 Learning Unit 2 - Discovering one's individual strengths



This learning unit is the first of three self-reflecting and / or self-assessing learning units. Based on a strengths perspective, the students face the task of analyzing what kind of strengths / competences they possess. In this connection, they examine their own individual roles taken in their everyday life (e. g. older sister, football player, computer expert, etc.). In order to perform self-assessments as well as assess other students, a learning process can be initiated. As a result of this process, competences such as reflecting, analyzing, giving feedback etc. can be acquired.

Focusing on an intercultural topic, it can also be interesting to abstract from the individual level to cultural typologies: For example, it could be analyzed, what is seen as the 'typical' strengths of Germans, a French or a Turkish person in general. In this way, cultural differences, stereotypes and conflicts can also be made a subject of discussion.

From a methodological point of view, there are many opportunities to create beneficial learning environments. In this context, it seems to be essential to offer the students a creative access to gain a strength-orientated portrait.

As an obligatory learning product, a strength list has to be prepared. It needs to be published in the weblog. This strength list can be extended during the process of the webLab-concept and in particular during the internship abroad. Besides this, other products can be posted in the weblog as mentioned in the following table.

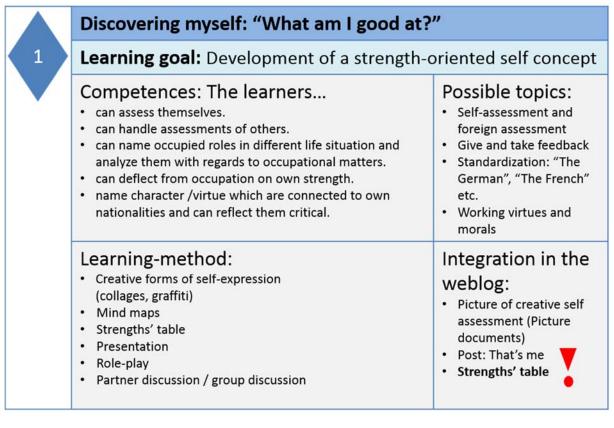


Figure 12: Learning Unit 2 - Discovering myself: "What am I good at?"

# Implementation of Learning Unit 2 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

Treated subjects: Application documents as an instrument to reflect on one's individual strengths

Used learning method, tasks etc.:

"The students were asked to write a CV and letter of intent to reflect on their own skills and aims for the internship. In order to do so, I handed out some guidelines how to write a CV."

"The students expressed their skills and aims especially in the sections: personal and other

skills/profile." (Responsible teacher at Franz-Jürgens-Berufskolleg)

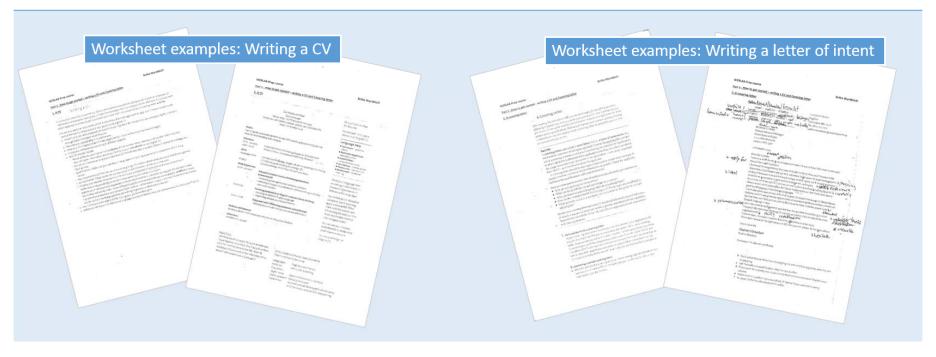


Figure 13: Example of Implementation of Learning Unit 2 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

#### 4.3.5.3 Learning Unit 3 - Exploring one's vocational profile abroad



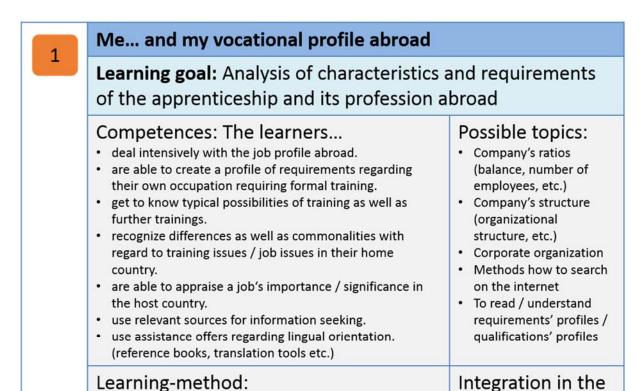
In the following learning unit, it is the students' task to explore their vocational profile abroad. Obviously, the way of implementing this task depends on how concrete their concepts concerning professions and occupations are. Accordingly, a student in an apprenticeship has a deeper understanding of specific working environments and vocational demands than a student, who is trying to get a qualification on a general education level and his vocational orientation has just begun. Consequently, a student's individual situation or starting point has to be considered.

Even if the level of concretization will be different from student to student, it seems to be crucial to analyze observed differences between the occupational profiles in the home country and the host country. Moreover, it can be interesting to let the students do some research both on specific training processes as well as possibilities of further education. It might also be interesting to reflect on the social standing of the chosen job / sector / field.

weblog:

· Post: Illustrating a

company's profile



(maybe in a foreign language?)

• Post: Illustrating a job's requirements' profile

Figure 14: Learning unit 3 – Me... and my vocational profile abroad

· Researches (Internet, conversations, etc.)

Creating companies' profiles

· Writing fictive job advertisements

Presentation

Within these research activities, the students get to know different sources of information, also on a European level. Simultaneously, the students can improve their language skills and enhance the handling of translation tools as a matter of course.

To link this learning unit to the weblog, the students are asked to post at least an exemplary (job) requirement profile concerning the chosen job / field etc.

# Implementation of Learning Unit 3 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

Treated subjects: Exploring a special vocational field in the foreign country

Used learning method, tasks etc.:

"During our first flow at Max-Weber we realized, that students are way more likely to block about cross-cultural experiences during their spare time. So work related issues were not that much on their mind and in their blog. To support the second-flow students blogging about work-related issues we created a handbook to give them a specific 'manual' when blogging. This manual also takes care of data-protection-issues. It also helps with marking the student's blog." (Responsible teacher at Max-Weber Berufskolleg)

→ Asking special reflective questions with regard to the objective of the learning unit

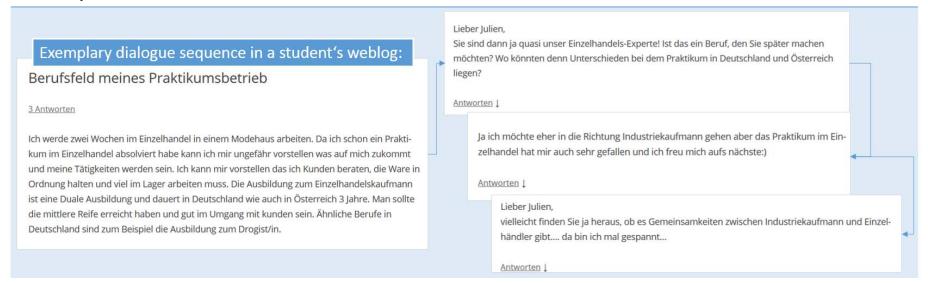


Figure 15: Example of Implementation of Learning Unit 3 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

#### 4.3.5.4 Learning Unit 4 - Setting goals for the stay abroad



This learning unit aims to widen the perspective of the individual student on his / her stay abroad (not only on the vocational internship). Accordingly, the student needs to realize, what interests he or she is carrying along with the mobility. For example, the student could intend to gain special cultural experiences (language, traditions, customs etc.). From a vocational point of view, it could be interesting for the student to see some specific departments or production areas, which are maybe particularly different from their known vocational environments.



Figure 16: Learning unit 4 – Me setting goals for my stay abroad

Altogether, aims for an individual competence development can arise against a background of both individual interests as well as curricular based learning objectives. In this learning unit, it seems to be very important to discuss objectives with other students and especially with the teacher.

Moreover, for this learning unit, the developed objectives need to be published in the weblog. This can offer another possibility of exchanging ideas regarding further or more detailed objectives.

# Implementation of Learning Unit 4 (IES Universidad Laboral, Albacete, Spain)

Treated subjects: Setting objectives for the internship abroad

Used learning method, tasks etc.:

"We have designed a blog with 7 tabs. [...] And each tab contents several questions that our students have to fill in along all the period (before, during and after the internship)

D) Setting Goals

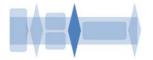
I want setting goals for my stay abroad:

- 1. Knowledge in German.
- 2. Technical understanding.
- 3. Knowledge in English. 4. Customs and tradition.
- 5. Accommodation ways.
- 6. Laws in the country." (Responsible teacher at IES Universidad Laboral)



Figure 17: Example of Implementation of Learning Unit 4 (IES Universidad Laboral, Albacete, Spain)

#### 4.3.5.5 Learning Unit 5 - Process of (re)defining goals



Looking back on the learning process up to this point, the students have analyzed their own strengths both as an individual as well as a member of a certain nationality / society (competence diagnosis 1). At the same time they have also explored vocational profiles abroad purposefully. In addition, aims have been discussed as well as set, concerning the stay abroad in general as well as referring to the specific vocational internship abroad. In this second competence diagnosis, both a matching according to the researches vocational requirements takes place and the individual / curriculum based learning aims. The student in this situation faces the challenge of estimating to which extent the chosen aims are reachable. In this process, he / she might need the help of the teacher. Furthermore, responses from other students can be helpful for an appraisal.

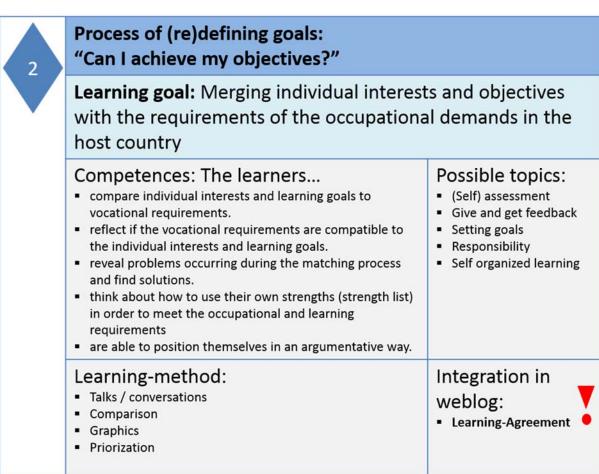


Figure 18: Learning unit 5 – Process of (re)defining goals: "Can I achieve my objectives?"

By the end of this learning unit, an agreement should be formulated, to which both teacher as well as learner commit. This learning contract needs to be documented in the weblog. During the stay abroad, it can be used as a guideline for both the student as well as the teacher.

#### Implementation of Learning Unit 5 (IES Universidad Laboral, Albacete, Spain)

Treated subjects: Reflecting on how oneself can achieve the objectives

Used learning method, tasks etc.:

"We have designed a blog with 7 tabs. [...] And each tab contents several questions that our students have to fill in along all the period (before, during and after the internship)

E) Can I achieve my objectives? Have I a good technical vocabulary? Have I a good knowledge of the English language? Do I know the ways to stay in the country? Do I know about the rules and agreements used in this country? Do I know accommodation ways in Düsseldorf? Do I know laws in the country? How are customs and traditions in Germany?" (Responsible teacher at IES Universidad Laboral)

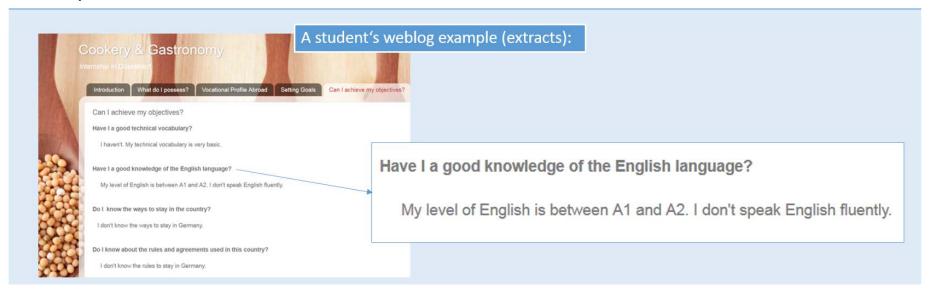


Figure 19: Example of Implementation of Learning Unit 5 (IES Universidad Laboral, Albacete, Spain)

#### 4.3.5.6 Learning Unit 6 - Undertaking the internship



Finally, the students can manage their internship abroad. At this step, they are well prepared and able to follow the previously set goals. In this phase, the weblog becomes a core instrument for accompaniment and support. The weblog can be supportive in the following ways:

- Problems and challenges can be communicated promptly by the student. The
  teacher can react and help in an appropriate way to the situation, even if he /
  she cannot be him- or herself on the spot due to their respective distances apart.
- The student is asked to document his / her daily experiences within the vocational internship abroad. In particular, he / she has to show or describe how the set goals (learning contract) are followed.
- The students' documentation offers the teacher a basis on which he / she can comment and by this foster the (next) activities for the student. For instance, the teacher could ask in the blog:
  - How was your first day? What was the most exciting experience for you so far?
  - You posted some pictures of the working environment. Why did you choose these pictures? What do they mean to you?
  - o In the learning contract, we recorded that you would like to get to know the tools, which are used in the foreign garage. Please do some research on that and take this as a topic for your next post.
  - o It would be nice if you could welcome me next time in the blog in Turkish.
  - o Etc.

For this very intense use of the weblog, it seems to be relevant to have some fixed rules concerning the regular use of the blog. This includes rules for both the learners as well as the teachers (see first learning unit 'Introduction').

Me... undertaking my internship abroad 3 Learning goal: Learn objective-based passing of the internship abroad Possible topics: Competences: The learners... get to know the internship's company. · Orientation on learning goals agreed integrate into the social group at their work. learn about typical products, processes, and procedures in day-to-day business. · do actively offer their work power. · follow their learning aims in a targeted way. document their experiences in the weblog. · consider the teacher's feedback (comments) from the weblog for running their further internship. Integration in the weblog: Learning-method: · Working via weblog: · Documentation of activities Exercises · Pictures, videos, podcasts, etc. - Exploring tasks · Communication of uncertainties, - Questions and hints questions, problems Consulting · Considering the teacher's tasks and Suggestions comments during the internship process · Daily / weekly reflections

Figure 20: Learning unit 6 – Me... undertaking my internship abroad

#### Implementation of Learning Unit 6 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

Treated subjects: Webbased reflection guidance (adressing e.g. vocational issues etc.)

Used learning method, tasks etc.:

"The students were requested to document on their experience abroad in form of a blog taking into account the following points: Write your blog every day/every Friday including the following points:

Include photos!!!!

<u>Work related</u>: What did you do when/where/how? What is different/similar to your work in Germany? What is positive/negative? Explain. What did you learn? What problems did you encounter? How did you solve it?

<u>Daily life/accomodation/transport/customs/people</u>: See above

Leisure activities: See above." (Responsible teacher at Franz-Jürgens-Berufskolleg)

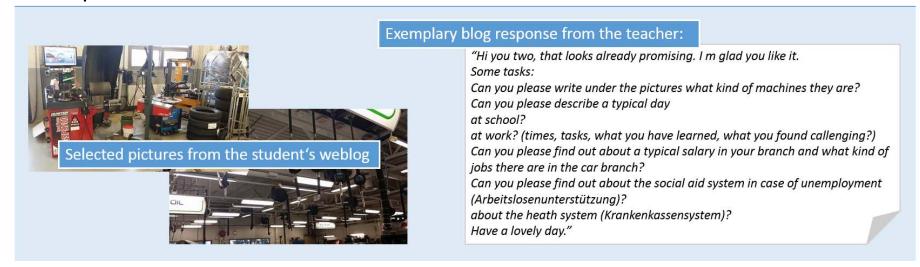


Figure 21: Example of Implementation of Learning Unit 6 (Franz-Jürgens-Berufskolleg, Düsseldorf, Germany)

### Implementation of Learning Unit 6 (Landesberufsschule Hartberg, Austria)

Treated subjects: Webbased internship report and reflection guidance

Used learning method, General internship report on the weblog, which has been supported by teacher tasks in order to reflect tasks etc.: both on vocational as well as private issues.



Figure 22: Example of Implementation of Learning Unit 6 (Landesberufsschule Hartberg, Austria)

# Implementation of Learning Unit 6 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

Treated subjects:

Webbased internship report and reflection guidance

Used learning method, tasks etc.:

"During our first flow at Max-Weber we realized, that students are way more likely to block about cross-cultural experiences during their spare time. So work related issues were not that much on their mind and in their blog. To support the second-flow students blogging about work-related issues we created a handbook to give them a specific 'manual' when blogging. This manual also takes care of data-protection-issues. It also helps with marking the student's blog." (Responsible teacher at Max-Weber Berufskolleg)

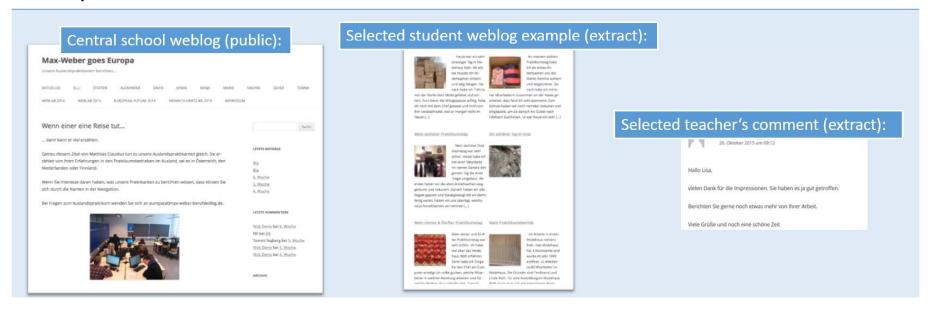


Figure 23: Example of Implementation of Learning Unit 6 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

# Implementation of Learning Unit 6 (Tekirdağ Teknik ve Endüstri Meslek Lisesi, Tekirdag, Turkey)

Treated subjects: Webbased internship report and reflection guidance

Used learning method, tasks etc.:

"After choosing the students we directed them to sign in blogger.com. We chose standart weblog names. We told how to write, how to create subpages and how to follow the comments. I have a room in the school so it was easy for us to teach them. Ultimately we encouraged them to write day by day to their blogs. Hopefully they started writing their blogs when the German students were here too. It was very important for us since our German students were a bit reluctant to post anything to their blogs."

(Responsible teacher at Tekirdağ Teknik ve Endüstri Meslek Lisesi)

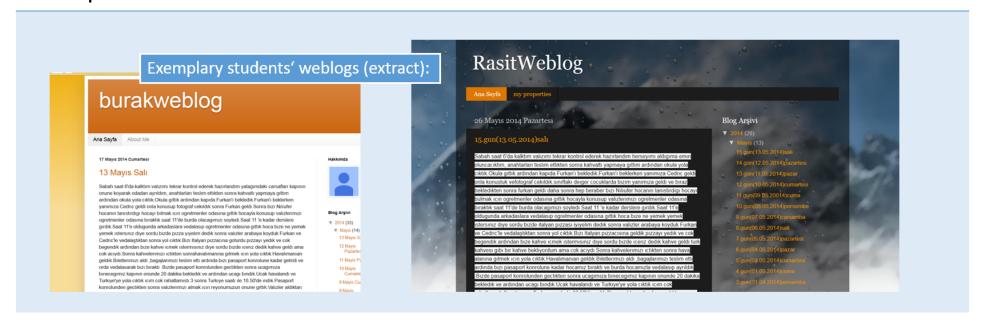


Figure 24: Example of Implementation of Learning Unit 6 (Tekirdağ Teknik ve Endüstri Meslek Lisesi, Tekirdag, Turkey)

#### 4.3.5.7 Learning Unit 7 - Reflection of the whole webLab-process



The internship as well as the use of the weblog does not finish with completion of the internship abroad. Following their return, students are asked to reflect their stay abroad with regard to their previously set goals.

In particular, they should be able...

- to formulate the main experiences / most impressive situations they have gone through,
- to describe mastered challenges and problems,
- explain the main differences to the vocational environment they know from their home country,
- to develop a position whether they can imagine accepting a job in a / this foreign country (why? / why not?),
- to summarize, what learning goals they could reach and in which way,
- to formulate what impact this internship abroad has had on their vocational orientation and / or occupational decisions that have to be made.

These reflections can be communicated in different ways. On the one hand, a reflection in the blog seems adequate. In addition, it is possible to let the students prepare presentations (poster, slides etc.). It is also possible to discuss the given questions in a learning group.

Figure 25: Learning Unit 7 – Reflection of the whole webLab-Process "What did I learn?"

# Implementation of Learning Unit 7 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

Treated subjects: Reflection on the objectives

Used learning method, tasks etc.:

"During our first flow at Max-Weber we realized, that students are way more likely to block about cross-cultural experiences during their spare time. So work related issues were not that much on their mind and in their blog. To support the second-flow students blogging about work-related issues we created a handbook to give them a specific 'manual' when blogging. This manual also takes care of data-protection-issues. It also helps with marking the student's blog." (Responsible teacher at Max-Weber Berufskolleg)

# Some impressions:

#### Lernziele

#### Hinterlasse eine Antwort

Ich finde ich habe alle meine vorherigen angegebenden Lernziele erreicht. Ich weiß jetzt das ich nicht im Einzelhandel arbeiten möchte, es ist zwar sehr schön aber ich möchte immer noch zur Bundeswehr ins Büro. Das ist mein größter Berufs wunsch. Ich habe mehrere Fertigkeiten im Modehaus Roth erlernt wie zum Beispiel: Geschäftsbriefe am Computer zuschreiben, Planung, wie ich etwas genau gestalte und meinen eigenen Arbeitstag zu organisieren und strukturieren ( was am wichtigsten war wurde zuerst gemacht). Ich habe ein neues und sehr schönes Land kennengelernt, eine neue Kultur und neue Menschen. In Österreich ist es üblich ein Wienerschnitzel zu essen und dabei ein Almdudler zu trinken. Die Menschen sind hier viel höfflicher und Gastfreundlicher als in Deutschland. Sie gehen offen auf einen zu. Ich kann jedem nur empfehlen mal nach Österreich zu reisen. Die Erfahrung und das Land sind es Wert weil man direkt ein Gefühl von Geborgenheit und Freundlichkeit empfindet. Außerdem ist Österreich sehr schön, hier gibt es große Städte wie Graz oder Wien aber auch kleine wie Hartberg.

Selected students' weblog posts:

#### Meine erreichten Lernziele

Hinterlasse eine Antwort

Ich habe sehr viele neue Tätigkeiten gelernt während meines Praktikum, die ich auch wirklich mitgenommen habe. Dieser Berufsfeld hat mir Spaß gemacht und ich könnte mir auch vorstellen im sozialen Bereich zu arbeiten jedoch denke ich trotzdem dass das Kaufmännische auch etwas für mich wäre.

Das arbeiten in einem anderen Land hat kein großen unterschied zu Deutschland, jedoch ist die Atmosphäre anders. Es ist sehr abwechslungsreich in einem anderen Land zu arbeiten. Im Ausland zu arbeiten wäre etwas für mich, da ich gut mit allem zurecht kam.



Figure 26: Example of Implementation of Learning Unit 7 (Max-Weber-Berufskolleg, Düsseldorf, Germany)

# Implementation of Learning Unit 6 (Tekirdağ Teknik ve Endüstri Meslek Lisesi, Tekirdag, Turkey)

Treated subjects: Certificate in order to illustrate the students' individual development, experiences etc.

Used learning method, tasks etc.:

"We wrote down the things that the students did in 2 weeks period. Our machine design department projected a unique certificate for us. [...] translated it in German and our certificate became bilingual. At the last day of the students, our school principal gave the certificates to the students."

(Responsible teacher at Tekirdağ Teknik ve Endüstri Meslek Lisesi)



Figure 27: Example of Implementation of Learning Unit 7 (Tekirdağ Teknik ve Endüstri Meslek Lisesi, Tekirdag, Turkey)

#### 4.3.6 Interim conclusion III

As mentioned before, based on intensive experiences gathered during the implementation process of the project, the webLab-concept has been continuously developed. Throughout the process the teachers could discover several potentials. The webLab-concept can be seen as a very helpful instrument or guideline to prepare and reflect the students' experiences abroad. Furthermore, the constant use of the weblog helps supporting and accompanying the students during their internship. However, the limitations of a weblog have also been identified: It turned out to be suitable to use more than one social media format to communicate in different situations (e. g. emergencies, general questions, cooperation among teachers etc.). It could be useful to consider this for further developments.

Although the basic instrument thus seems to offer a solid basis of a qualitative development, as it is closely connected to both basic intercultural as well as media competence assumptions, the understanding and reception of webLab-concept also constitute some challenges. It sometimes seems, for example, to be difficult for the teachers to subscribe a students' perspective — as required in the framework of the webLab-concept. Another challenge can be identified in the general necessity of the development as well as differentiation of the basic webLab-concept (as a programme). Accordingly, some teachers need help in order to use the webLab-concept on their own and adapt the concept to their own didactical needs and circumstances. Against this background, during the webLab project, a teacher-training course has been developed additionally. As a result, one can refer to the Advanced Teachers' Training Concept (ATC) as the second main product of the project. Bearing in mind, that the two main concepts are closely interrelated, the ATC will be presented in detail in the following chapter.

#### 4.4 The Second Main Product: The Advanced Teachers' Training Concept (ATC)

#### 4.4.1 Preliminary Remarks to the ATC

As already indicated, the main purpose of the ATC is to describe how teachers are going to be prepared in order to undertake successfully the underlying webLab-concept (see previous chapter). The development of the project has shown that sometimes there might be some difficulties regarding the general understanding of the underlying webLab-concept. For instance, if a teacher does not recognize the learning units adequately, the intended questions can be misunderstood. Consequently, it is necessary to ensure that the underlying concept should be intensively worked on in

order to internalize them in an adequate way and enable teachers to adapt them to their own didactical needs.

Thus, the present chapter illustrates the basic principles of the ATC. As illustrated in the figure below, the ATC is divided into five different modules, each with a different content-based or goal-oriented focus.

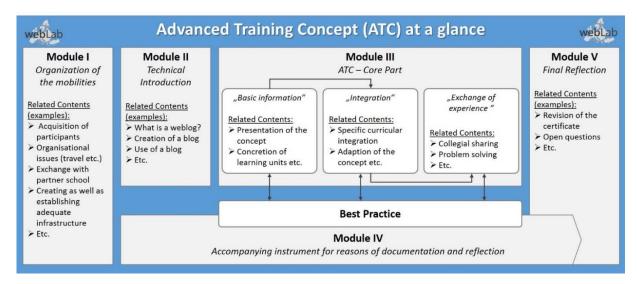


Figure 28: Advanced Training Concept (ATC) at a glance

In the following, each module will be presented in detail. Please note that the ATC offers a framework for an adequate (teachers') training in order to undertake successfully the underlying webLab-concept. Consequently, the ATC training concept was developed on the basis of certain teacher profession related assumptions. Therefore, it is related to general teacher competence areas (see KMK, 2014). One part of professional teaching is a genuine academic pathway to work on innovative teaching practice (see ERTL / KREMER 2009). Thus, the Advanced Training Concept focuses on handling a reform process on the school level to reflect, explore, actively shape and improve their own work environment on a continual basis. Therefore, the present Advanced Training Concept is based on the competences of teachers to work in teams, reflect their own teaching and learning process and build competence oriented learning environments.

### 4.4.2 Module I: Organization of the mobilities

Within the scope of the project webLab, the organization of mobilities imposes high demands on the participants involved. Amongst other reasons, this is due to the target group involved and more specifically to the curricular classification. Hence, it was implemented in different educational programmes. Partially, it is not possible to draw on existing exchange programmes with the result that the organizational expenditures differ amongst mobilities.

Prior to the actual engagement in the webLab-concept, it is therefore very important to deal with the organization of mobilities. For the purpose of this module, ATC-participants should be empowered to arrange mobilities, solve relevant issues and, as appropriate, identify possible problem areas. On this basis, a solid fundament for following modules can be created. Table 1 represents the essential cornerstones of the module.

#### Module I "Organisation of

# the mobilities" Related Contents

- (examples): Acquisition of
- participants
- Organisational issues (travel etc.)
- > Exchange with partner school
- Creating as well as establishing adequate infrastructure
- > Etc.

Figure 29: Module I

Module I: Organization of the mobilities

Module objective(s):	Organizing the mobilities in order to create a solid basis on which the following modules can be built on.
Competences. The ATC-participants should	<ul> <li>know about typical problem areas of mobilities.</li> <li>know about typical sequences of mobilities.</li> <li>know about relevant funding issues.</li> <li>know how to prepare their students in terms of mobilities.</li> <li>know about relevant legal issues.</li> </ul>
Possible contents:	<ul> <li>important forms</li> <li>students' selection and acquisition</li> <li>establishing contacts to own partner school</li> <li>arrangement of adequate student accommodation</li> <li>trip scheduling / travel plans</li> <li>plan the timing of mobilities</li> <li>assigning responsibilities</li> <li>informing participating companies</li> <li>informing students' parents</li> </ul>

	<ul> <li>creating as well as establishing adequate infrastructure</li> </ul>
Possible learning method:	<ul> <li>developing a site-specific checklist (from both students' and teachers' perspective)</li> <li>brainstorming: "Which aspects needs to be considered regarding the organization of mobilities?)"</li> </ul>
Possible integration in the ATC-weblog:	Please note: At this stage of the ATC, the ATC-weblog has not yet been introduced to the participants. At a later point, it would be helpful to upload the checklist on the weblog.

Table 2: Overview Module I (Organization of the mobilities)

#### 4.4.3 Module II: Technical Instruction

In the framework of a second module, the technical issues should be introduced. Working with new medium weblog can absolutely pose a challenge. Partially, the teachers are not familiar with this medium and they do not work with it in their own realm of experience. However, in principle it can be considered as a condition that the teachers, who like to introduce the weblab-concept to their students, should first be familiar with that kind of technology. Possible obstacles need to be overcome. Accordingly, the module aims to give teachers an

# Module II "Technical Introduction" Related Contents (examples): > What is a weblog? > Creation of a blog > Use of a blog > Etc.

Figure 30: Module II

understanding of the social media tool weblog and to suggest possible fields of action within the underlying context. Precise expectations of competences are illustrated in the table below. Moreover, it includes references to the content of the module and methods in which way these competences can be achieved. In addition, the appendix includes exemplary work sheets for the creation and the use of a weblog within the scope of the webLab-concept.

Module II: Technical Introduction

Module's objective(s):	Learning about the new media format weblog and getting
	some hints regarding its use within the context of
	organizing as well as conducting students' internships abroad.

# Competences -**The** ...be able to create a weblog (in an adequate content **ATC-participants** management system). should.... ...know how to use a weblog in terms of using the technology. ...know how to use a weblog in terms of didactical means. Possible contents: creation of a weblog use of a weblog o communication structure ("Who writes to whom and how often?") o allocation of roles (such as author, guest, etc.) o posts' status (public, private) o other agreements How many posts and when to post? deadlines (for comments, etc.) assignments' type (planned, spontaneous, etc.) length of the posts possible formats (texts, pictures, videos, links, podcasts, etc.) advantages and disadvantages of a weblog (from a didactical perspective) responsible use of the weblog tool o data protection issues o sensitive operating data netiquette agreements fair and respectful interactions level of linguistic accuracy o use of emoticons Possible learning • case example (see figure 32) methods: brainstorming "Advantages and disadvantages of a weblog" group discussion "Advantages and disadvantages of

a weblog"

# Possible integration in the ATC-weblog:

- the learning results of the work assignments could be integrated
- the discussion could be integrated (by using comments etc.)

**Table 3: Overview Module II (Technical Instruction)** 

The following working sheets have been developed for the ATC and can be seen as suitable materials in this phase of the teacher's training. The trainers firstly make use of an adequate case example and Mr. Leo Nardo is introduced to the participants in order to fulfil this target.



Figure 31: Worksheet ATC 1

As adapting the webLab-concept demands a high level of conceptual work, the case example should help the participants to follow the tasks by putting themselves into the situation of Mr. Leo Nardo. Therefore, the introduction of the case example is presented as follows: "Mr. Leo Nardo is a young and highly committed teacher at a German vocational school. In his school he is responsible for students' internships and in this function he also takes part in the webLab project. Within the framework of this project,

he has become acquainted with the medium weblog and its use within the process of organising as well as conducting students' internships abroad."

The first three worksheets introduce the case and aim to enable the teachers to create and use a weblog by themselves (see figure No. 31 and 32). Therefore, the participants are given step-by-step-instructions.

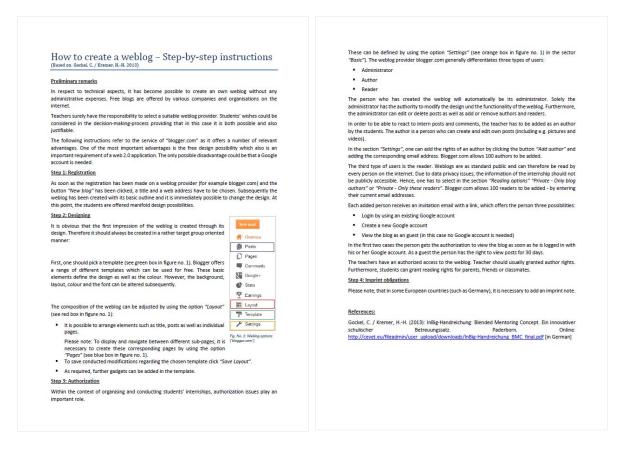


Figure 32: Worksheets ATC 2 and 3

In respect to technical aspects, it has become possible to create one's own weblog without any administrative expenses. Free blogs are offered by various companies and organizations on the internet. Teachers surely have the responsibility of selecting a suitable weblog provider. Students' wishes could be considered in the decision-making-process providing that in this case it is both possible and also justifiable. The instructions being used here refer to the service of "blogger.com" as it offers a number of relevant advantages. One of the most important advantages is the free design possibility, which also is an important requirement of a web 2.0 application. The only possible disadvantage could be that a Google account is needed. After having completed these first tasks, the participating teachers should be able to create and run a weblog on their own.

# How to use a weblog – Some remarks and hints (Based on: Gockel, C. / Kremer, H.-H. 2013)

#### Preliminary remarks

After having set up the weblogs, the students should be familiarized with the usage of this medium. The weblogs offer various communication possibilities. The most important functions within the context of students' internship abroad will be presented in the following. Subsequently, the rules for Online-Communication will be discussed, which offers a guide for teacher-student interaction.

#### 1) Static pages

Static pages in weblogs make it easy for reader (teachers, students, internship supervisor, social worker, parent, etc.) to access and present important information about the internship through the navigation bar. Important information which did not get included in the sequence of weblog postings can thereby be located on the static pages. These pages could for example contain indication and explanation of the company or the expectation towards the internship. Moreover, several pages can be added to the weblog such as a "About me page", a "Rule of conduct page" as well as a "Contact page" which could contain the address, phone number of the attended company.

#### 2) Posts

Posts and comments are the main components of an internship's webblog. They are listed in a reverse chronological order which means that the weblog posts are dated and the most current post is on the top. Older posts can be accessed through the archive, which makes every post at any time accessible.

Every post is equipped with its own unique an unchangeable internet address – the so-called permalink - through which posts are uniquely identifiable so that they can be linked.

#### 3) Comments

Every comment can be entered as a post or a static page through a corresponding online form. Usually the basic settings of weblogs allow readers to comment on posts whereas static pages need a corresponding activation for this function. This activation on the blog provider "blogger.com" is found on the register "Pages" and the option "Allow reader comments".

Afterwards a post can be commented by members of the weblog. At the end of every post, a corresponding section with the amount of comments posted is next to the author information and creation time. If this section is opened a new writing field will appear where comments can be written in. Before publishing the comment a preview function is possible.

It could be helpful to establish online-communication or hales with rate students notensure and ordinarion. These should be binding rules for mentees and mentors.

#### References:

Gockel, C. / Kremer, H.-H. (2013): InBig-Handreichung: Blended Mentoring Concept. Ein innovativer schulischer Betreuungssatz. Paderborn. Online: <a href="http://cevet.eu/fileadmin/user-upload/downloads/InBig-Handreichung-BMC final.pdf">http://cevet.eu/fileadmin/user-upload/downloads/InBig-Handreichung-BMC final.pdf</a> [in German]

Figure 33: Worksheet ATC 4

#### 4.4.4 Module III: ATC – Core Part

The third module represents the core part of the ATC. After focusing on organizational

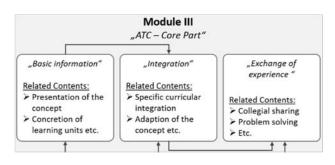


Figure 34: Module III

and technical aspects in the first two modules, module III focuses the actual webLab-concept. The ATC participants should get to know the basic principles of the underlying webLab concept and be able to adapt them according to site-specific aspects as well as their individual experiences in this context.

The webLab manual (see previous chapter) cannot only provide exceeding details, but can also be seen with regards to content as the basis of the whole module.

It should be clearly stated that the webLab-concept only illustrates the framework, which requires an embodiment or an adaption to the underlying structures by the participating teachers. Correspondingly, participants of the ATC-training are asked to adapt the presented concept to their own coherences (second step). A more detailed description can be found in the table below. In an exchange phase teachers can discuss contextual experiences, identify problems and develop problem-solving approaches.

**Module III: ATC - Core Part** 

Module objective(s):	Getting to know the basic principles of the underlying Advanced Training Concept (ATC) and adapting them based on site-specific aspects as well as experiences in this context.
Competences. The ATC-	Basic information:
participants should	know the underlying webLab-concept in depth. be able to focus a students' perspective on a conceptual basis be able to concretize learning units.  Integration: reflect about the underlying webLab-concept based on site-specific aspects.

#### Integration:

...deal with site-specific aspects of the webLab-concept.

...know how to integrate the webLab-concept into individual structures/own school/everyday school life etc.

#### Exchange of experiences:

...know about the experiences of other participants.

...learn from other experiences.

#### **Possible contents:**

#### Basic information:

- presentation of the webLab-concept in depth (from a student's perspective)
- concretion of the learning units (by developing adequate learning materials, etc.)

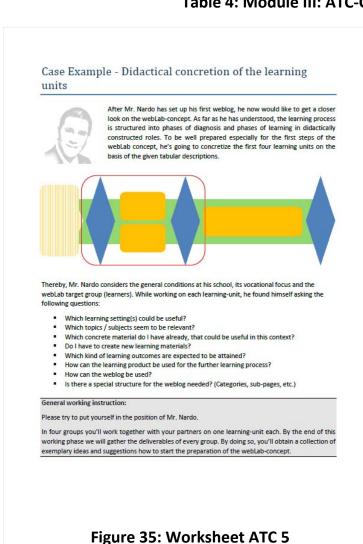
#### Integration:

- specific (curricular) integration
- development of a site-specific (school-specific) concept:
  - o choosing an appropriate learning group
  - defining as well as establishing connections on a curricular, didactic and organizational level
  - integrating the webLab-concept in everyday school life
  - o planning the content and time schedule of adequate learning environments
  - o developing an adequate infrastructure
  - viewing relevant documents and materials,
     which already exist at the school regarding the realization of internships
  - developing new materials
- integrating individual / site-specific objectives into the certificate

#### Exchange of experiences:

# arising problems handling problems exchange materials, etc. **Possible learning** case example (see figure 35) method: concretion of the learning units (group members from different schools) group Work (see appendix 'Module III – Worksheet B, C, D, E') "Future Workshop" – Planning an ideal type teaching-learning sequence Possible integration in The learning units could be uploaded on the weblog the ATC-weblog: (including exemplary teaching and learning concepts as well as materials).

**Table 4: Module III: ATC-Core Part** 



answer the following questions:Which learning setting(s) could be useful?

Figure 35 illustrates a possible worksheet within the context

of this phase of the ATC. In this

worksheet, the case example

also continues. The task aims

to help the participants of the

ATC concerning the concrete didactical implementation of

the learning units of the underlying webLab-concept.

participants should work in

groups. Each group focuses

learning units and tries to

the

this,

preparatory

the

achieve

of

To

- Which topics / subjects seem to be relevant?
- Which concrete material do I have already, that could be useful in this context?
- Do I have to create new learning materials?
- Which kind of learning outcomes are expected to be attained?
- How can the learning product be used for the further learning process?
- How can the weblog be used?
- Is there a special structure for the weblog needed? (Categories, sub-pages, etc.)

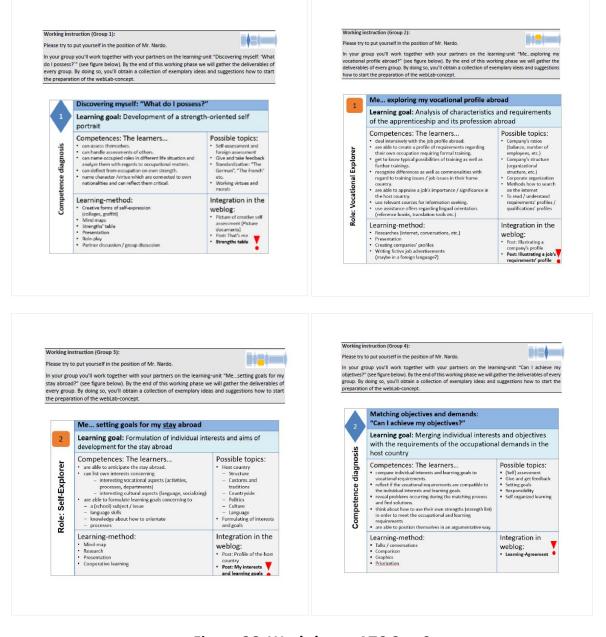


Figure 36: Worksheets ATC 6 to 9

#### 4.4.5 Module IV: Accompanying Instrument

The	Module IV
accompanying	"Accompanying instrument for reasons of documentation and reflection"
instrument is as	Figure 37: Module IV

instrument is as such not an

independent module. Instead, it is more about getting the participating teachers and trainers actively acquainted with this medium in order to motivate them to work with it. Consequently, it follows and is closely related to the second module, where teachers have already been introduced to basic technical issues. The ATC-weblog should document the results of the ATC and get the teachers to reflect them. This approach is based on the assumption that the teachers need to be familiar with the medium in order to motivate the students the other way round. Accordingly, the accompanying instrument should contribute to removing existing obstacles and illustrate various usage possibilities in this context. By doing so, teachers will consciously take on an active role and try to link their own learner's position (in the framework of the ATC) with their position as a teacher (using the webLab-concept).

**Module IV: Accompanying Instrument** 

Module objective(s):	Using the ATC-weblog as an accompanying instrument for reasons of documentation and reflection.
Competences. The ATC-	learn how to use a weblog according to their own
participants should	individual needs.
	use the weblog to document the overall ATC-activities.
	get used to the (new) technical tool.
	reduce existing obstacles.
	improve their general technical competence.
	be able to motivate students' using the weblog.
	communicate as well as coordinate with each other.
	reflect their own actions.
Possible contents:	See other modules.
Possible learning method:	See other modules.

Possible integration in - the ATC-weblog:

**Table 5: Module IV: Accompanying Instrument** 

During the ATC in the context of the webLab-project, an ATC-weblog has also been created. This weblog should help the participants to get used to the weblog-technology and provide a good platform for communication. Accordingly, the participants have been asked from time to time to present their activities in the context of the weblog. Thus, the participating teachers provided information on both good-practice examples as well as dissemination activities. Additionally, also dropbox has been integrated in order to be able to exchange documents such as learning materials etc.



Figure 38: Using a weblog within the ATC to accompany the teachers I



Figure 39: Using a weblog within the ATC to accompany the teachers II

#### 4.4.6 Module V: Final Reflection

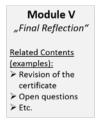


Figure 40: Module V

Within the framework of the fifth module, the ATC-participants should reflect the overall ATC and consider possible (critical) success factors. Against this background, they should analyze their own learning curve and identify possible fields of development. By doing so, the ATC should be rounded up. At this point, the participants should also decide whether they would like to keep the ATC-weblog running. It is highly recommended to continue, stay in contact, and exchange both experiences as well as materials on a regular basis.

#### **Module IV: Final Reflection**

Module objective(s):	Reflecting about the overall ATC, its (critical) success factors as well as possible fields of development.
Competences. The ATC-	resume their own learning curve.
participants should	state clearly relevant factors of successconsider their own development requirements.
Possible contents:	<ul> <li>review: Potential and challenges of overall ATC</li> <li>relevant factors of success</li> <li>individual development requirements</li> </ul>

	evaluation
Possible learning method:	<ul><li>determination of position</li><li>SWOT-analysis</li><li>ATC field report</li></ul>
Possible integration in the ATC-weblog:	Exchange within the context of the ATC-weblog about the ATC in general.

**Table 6: Module V: Finale Reflection** 

#### 5 Overall Conclusion

With the project webLab – development of competences in a web-based laboratory – conceptional base (webLab-concept) for the web-based preparation, implementation and reflection of an occupational internship abroad has been introduced. With the help of this reflection and documentation in a weblog, this base for focusing on the learner's individual competence development enables the possibility of interaction between the learners, training supervisors and teachers. Based on the individual strengths and potentials, it is primarily about planning the internship and secondly formulating the learning targets. These targets stretch from the acquisition of intercultural competences to curricular ambitions. They are complemented by the learner's individual purposive idea so that an active participation of the learner can be carried along since the start of the learning process. During the execution phase the learner tries to implement the previously made learning agreement and documents them in a weblog. After completing the internship abroad, the learning process should be reflected in general. In this phase it is important to take the learner's cognition into account in order to gain results from the common made assessment. In this context, a connection to vocational artwork can be incorporated in which the possibility of an apprenticeship or occupation abroad can be reflected. The whole learning process - from preparation to implementation to reflection of the occupational internship - is governed by a weblog. During the preparation phase this enables face-to-face support by the teachers. Simultaneously the learners and teachers get used to the weblog. During the time of the occupational internship abroad the weblog is the main accompanying instrument. It serves as an exchange and documentation platform between learners and teachers. In this way the learner's learning process during the internship can be reproduced and specific tasks for research, theoretical immersion, cultural reflection etc. can be initialized by the teachers on the base of the learning agreement. Basically the formal documentation in the weblog should prepare or even replace the summative internship report. The rate of self-organization can be rated by the combination of face-to-face and virtual companionship sequences with the learner's abilities and skills, likewise this format can also take the given internship aims and agreements into account. WebLab gives teachers in the field of vocational education the possibility to support the adolescents

- to recognize and reveal their learning and developmental possibilities,
- to provide aims to their mobilities and to use these for their own vocational development,
- to document and visualize requirements abroad,
- to take their own competence development systematically into account,
- to get individual response on specific but also on ordinary occurrences,
- to connect social media systematically to their learning track.

In this way- webLab reflects the learner's perspective and offers a curricular program for preparation, companion and postprocessing the occupational internship abroad. WebLab cannot be understood as a technological innovation but as a didactic methodical concept for using social media services. As such, webLab enables the possibility that adolescents can combine occupational internships abroad with their own vocational development. Thereby the boundaries of the respective nationallyshaped and anchored vocational education system cannot be dissolved, but with webLab the integration of the learner's vocational experiential space in the occupational qualifying track can succeed. At the same time, open challenges of a digitized life and workplace are recognizable. Social media indeed offers an interesting potential for the vocational education, but this project also clarifies the challenges of the educational work in a digitized workplace. It conveys that considerable challenges occur for the learners while integrating social media into their own established educational structure. At this point, the Advanced Teachers Training Concept (ATC) assesses. This program focuses on a qualitative improvement of the company of the operational internship abroad within the scope of vocational education. Thereby it must be taken into account that the webLab-concept cannot be detached from the general configuration of mobilities. Especially the organization and integration of mobilities into educational work is connected with multiple challenges, which can also affect the dealing with the webLab-concept. This should now be summed up by the following example. It has turned out advantageous when the company of the mobilities is anchored within the apprenticeship measure and when not only one teacher takes the responsibility for it. Therefore, the learner's selection can already be anchored in the educational work, the blog can be integrated into different learn and apprenticeship sections and the benchmarks can be better anchored. As a result of these interfaces it becomes obvious that mobilities always carry along a special challenge for educational institutes and that these must be systematically anchored in the particular organization. The ATC entangles the challenge of the organization and integration of mobilities in the educational programme work with the up to now few considered qualitatively improved company of mobilities via the webLab concept. The ATC offers a frame for teachers to realize the webLab-concept.

Mobilities are connected with very different aims and appear as complex and open challenges for adolescents in the context of vocational apprenticeship measures. Mobilities offer the opportunity to immerse into other cultures or habitats, to collect experiences, but also to reflect one's hitherto experiences.

Although mobilities seem to be organized and implemented in various ways, there seem to be fixed concepts about which outgoing systems can be considered and in which systems students can enter within vocational stays abroad. Within mobilities in vocational training in Germany, for example, students predominantly change from the host company to a company in the same sector abroad. That way the possibility of doing an internship abroad always depends on the approval of the host company on the one hand. On the other hand, existing partnerships to companies or branches abroad often also make a mobility possible. This makes mobilities difficult, which are organized and implemented by schools. In the project webLab it turned out, that on the one hand it was too hard to meet all requirements of the companies to send students from the dual system abroad. On the other hand, it was also hard to find companies in Germany who were willing to take foreign students from abroad. This shows that mobilities and their structures including the involved systems or institutions have to be reconsidered. The question arises: Why should vocational learning only be possible in a company-based internship? As an alternative within the project webLab the exchange between vocational schools of two different countries was taken into account: Students form a full-time school based training in Germany were sent to a school-based car workshop in Finland. Both students worked and learned in mechanical contexts. Such wider concepts of mobility could make it also possible that student on a lower level of education can gather experiences and competences abroad.

It could also be a way to combine the sometimes quite hard fitting vocational education systems.

Nevertheless, it often remains open to the student what can be experienced, where differences appear or how experiences should be handled or revealed, or how to behave in challenging situations. WebLab offers therefore a web-based company format, which requests to accompany the learner to find his way of mobility. It remains open to transfer the webLab-concept into an individual navigator for learners.

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This book has been developed within the Leonardo Da Vinci project 'webLab – Development of competence in a webbased laboratory'. This project targets to demonstrate individual ways of development in vocational education for adolescents via a stay abroad.

In a society that is affected by globalization and migration, intercultural competence is acknowledged to be a personal and professional key qualification for all young persons. Internships' abroad seem to provide an adequate learning environment for professional future development. However, it is not sufficient to offer only the possibility of a stay abroad but it is also essential to illustrate systematically ways of using and integrating these contexts into one's own competence development. This requires a systematic preparation, implementation and evaluation of stays abroad. Especially in the context of stays abroad, it is necessary to find ways for reaching attendance and support of the adolescents.

This book is written for vocational institutions and teachers – particularly within the VET sector – who are interested in the implementation of mobilities resp. stays abroad as a possibility for learning and personalized development. Accordingly, this release deals with common challenges and requirements concerning mobilities. It also deepens the contents of its didactical basis as well as providing an advanced training concept for teachers. Furthermore, concrete examples of implementation are integrated within the context of the publication.