

# How to use the material as part of blended mobility in preparation for physical mobility

TOOLS FOR SKILLS INTEGRATED LEARNING OF ENGLISH AND FORESTRY TEACHER TRAINING PROJECT N° 2015-1-SE01-KA202-012255



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# DEDICATION

In memory of Regas Santas. His commitment to excellence, visionary thinking, expert advice and good-natured character have always motivated us and will be eternally the guiding light for all our efforts.

The Greek Team

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### FOREWORD

Learning mobility helps individuals to increase their professional, social and intercultural skills and employability. This is the cornerstone of the internationalisation and modernisation of education and the main tool for the further development of the European Higher Education Area. In order to achieve successful, cost-efficient and sustainable results of a sufficiently high quality, it is necessary to clearly organise Erasmus Charter for Higher Education 2014-2020 Annotated Guidelines defined activities - before, during and after mobility - within the framework of an institutional mobility culture which involves the whole academic community<sup>1</sup>.

The following material is addressed to all parties involved in any student exchange program: the sending school, the receiving school, the teachers and the students.

Many of the items listed in the text have already been implemented by the Tools for Skills – Teacher Training project partners; however, they are included here as a reference for general use and potential future projects.

<sup>1</sup> ERASMUS CHARTER FOR HIGHER EDUCATION 2014-2020 – ANNOTATED GUIDELINES –



# 1. PREFACE

### The Origins of the Tools for Skills Project

In 2005, windstorm Gudrun (<u>https://en.wikipedia.org/wiki/Cyclone\_Gudrun</u>) knocked down 16% of the Swedish forests (75 million cubic meters of trees decaying on the forest floor of southern Sweden) causing 7 deaths, a 2.4 billion EUR damage (<u>https://www.sciencedaily.com/releases/2012/08/120824082423.htm</u>), corresponding to 110% of the average annual Swedish income from forestry operations, and the largest lumber surplus and thus the lowest prices of lumber in the history of Swedish forestry. Moreover, the storm had a dramatic impact on Swedish politics, where the incumbent Social Democratic party was defeated in the following 2006 elections due to the poor handling of the crisis.

Taking into account the global climate change and the increased likelihood for similar or larger-size natural disasters of this type in the future, Sweden developed an emergency plan for dealing with such unexpected, but highly catastrophic natural disasters. Part of the plan was a disaster relief force consisting mainly of skilled forest harvester and forwarder operators transferred from other regions of Sweden and/or imported from neighboring countries (e.g. Finland, Norway, Germany, etc.) and ready for immediate deployment.

Coordinating such a diverse group of people could prove a daunting task requiring, among others, crossing multiple language and cultural barriers and generating a base of communication and understanding, despite any similarities among Scandinavian languages and mentality.

In this endeavor, English was the language of choice as it offers many additional benefits, such as that it is spoken as a second language in many more countries than the above ones, and thus gives the option of recruiting and training workers from countries all over the world.

The "Tools for Skills" project of vocational training and student exchange can be considered a spin-off of that emergency plan. It is a flexible, self-paced tool for fast English terminology learning, for augmenting technical skills and for acquiring essential soft skills, such as communication in a social and/or professional environment, professionalism, self-development, team-spirit, introduction to the work environment, etc. The project is addressed to non-native English speakers, and it can be easily modified to become a guided teaching method for accelerated learning of groups with widely varying cultural and educational background.



# 2. **DEFINITIONS**

For the purposes of this essay, the following terms have the meanings assigned next to them, and will be used hereafter.

The term "school" will be considered synonymous and interchangeable with the term 'Higher Education Institution' (HEI), in the meaning of the Erasmus+ legal base<sup>2</sup>, cited on p. 2 of the *Erasmus Chapter for Higher Education, 2014-2020*.

According to this definition,

Higher Education Institution is:

a) any type of [...] institution, which in accordance to the national law or practice, offers recognized degrees or other recognized tertiary level qualifications, whatever such establishment may be called, or

b) any institution which in accordance to national law or practice offers vocational education or training at tertiary level.

Therefore, for the purposes of this document, the term "school" is a collective noun encompassing HEIs, Universities, Vocational Training Schools, Colleges, Technical or Vocational Schools, etc.

The terms "student", "trainee", "learner", ... are considered synonymous, regardless of whether they refer to full-time or part-time learning, internship programs, on-thejob training, hands-on-training, practical or theoretical work or study, etc. The above terms can include students and/or teachers attending domestic or international coursework.

Similarly, the terms "tutor, "teacher", "trainer", "instructor", etc. are used synonymously to mean an individual in charge of transferring knowledge to students and/or helping students manage their learning process to attain certain goals.

"Physical mobility" includes student actual traveling from the home country to the receiving country to attend courses.

"Virtual mobility" are courses taken in other school(s) through ICT-enabled learning (ECTS User's Guide, 2015. European Commission Publications Office. p. 36). This is different from physical mobility in the respect that it does not require the physical presence of students to the destination country. Thus, it is possible to watch videotaped lectures, participate in online discussions and tutorials, ask questions, study in virtual libraries, utilize additional resources, equipment and facilities, do homework, write essays and exam papers, and take quizzes and exams online. Following this definition, virtual mobility courses increase in frequency worldwide, as many of the major Universities offer many of their courses online.

<sup>&</sup>lt;sup>2</sup> Official Journal of the European Union L°347/50 of 11.12.2013



"Blended mobility" is defined as short-term physical mobility combined with virtual mobility, which might be supported through strategic partnerships [between schools] (European Commission, 2016. "Erasmus Charter for Higher Education 2014-2020. Annotated Guidelines", p. 4). Therefore, it can be stated that:

Blended mobility = Virtual mobility + Physical mobility

"Syllabus" is an academic document that communicates course information and defines expectations and responsibilities.

Every effort has been made to avoid gender bias and sexism in this text. In rare cases, however, the masculine inflection forms of nouns, pronouns and/or adjectives is used to refer to both sexes, without any prejudice, sexism, exclusion, offense, bias, discrimination or disrespect.



# 3. STUDENT EXCHANGE PROGRAMS

Student exchange programs are a tool capable of yielding remarkable results in the education and self-development of students and workers, and also promoting social integration and coherence. The programs cover various academic, vocational, social and cultural areas. All exchange programs are implemented within the framework of allowing students to visit other countries, be exposed to different approaches to some vocational situations and educational systems, and meet the local people and culture. The ultimate goal of any EU-funded exchange program is to help European citizens learn new skills to improve their employability or to find a better job. For vocational training students, exchange programs usually result in a better analysis and perception of employment problems students are likely to encounter in their future careers.

### 3.1 The Stakeholders

Any student exchange program has four stakeholders: the sending school, the receiving school, the teachers and the students themselves.



#### Figure 1. Stakeholders in a student exchange program

As it can be seen in the above Figure, Students are and always will be at the center of attention and all actions revolve around them. The positions of the other three stakeholders relative to each other are maintained, although it can be imagined that the triangle and its circumscribed circle revolve freely around their common center.



Therefore, it is not important whether the Teacher will be at the top or at the base of the triangle, or whether the Sending school will be to the left or right side of the triangle. It is also evisioned that schools will have interchangeable sending and receiving roles; i.e. under some circustances, students will leave the Sending school to travel to the Receiving school, whereas under a different set of circumstances, this flow might be reversed.

# 3.2 The Challenges



Before deciding whether to enter such an international mobility program, students usually experience some insecurity and tend to ask themselves a lot of questions about the pros and cons of the endeavor. Fear of the unknown is anticipated, but the results of this once-in-alifetime experience more than compensate the initial reluctance.

A new cultural context can be quite intimidating at the beginning and may lead to cultural shock. Once this initial shock is over, students will have the opportunity of acquiring some high-valued skills in the labor market, such as creativity, team work and effort, for example, see Case study of Lesson 1.2.2 http://cd.dictyon.net/lesson/Lesson-2-Factors-affecting-the-work-environment-and-ways-to-improve-it-24), adaptability, communicating skills, etc. in addition to the standard vocational skills.

Overcoming the fear plus the new experience will bring the student the opportunity to increase its self-esteem, to reach a greater independence level and will help him/her to face better different problems and situations.

Student exchange programs are meant to be "total immersion courses". Visiting students will live 24x7 in a completely different cultural and physical environment from the one in their respective home-countries and they will be devoted to learning and/or socializing with native students or visiting students from other countries at the same time.

During the first days, students will start meeting native or other exchange students, different from their usual context. Students should try to engage in conversations with other people to improve their communicating skills, both speaking and listening.

At the same time, students must try to overcome the cultural shock and adjust in the new cultural context they live in. Students can achieve this by taking in general information from various sources, such as local newspapers, magazines, TV, cultural events, visiting museums, restaurants, etc. assuming these are easily accessible and not too expensive.

Since it is unlikely that visiting students will speak the local language, this exposure to the media will help students with the process of practicing English and thus improve their communication skills. Sightseeing and learning more about the host



country and its local culture is an additional pastime activity during the initial adaptation stage.

Students may be interested in taking up extracurricular activities upon completion of their daily or weekly study/work-related tasks or over the weekends. Visiting museums and exhibitions, attending local folklore events, trade shows, music festivals, walking in parks or other natural reserves, etc. will help students become familiar with the local history and culture. All of the above represent excellent opportunities to practice the English language.

Students are free to travel as much as possible during the weekend with some other students, in order to explore new places and meet local people. Students will take advantage of these circumstances and will be able to plan these trips in advance looking for the cheapest offers both tickets (to attend to different events) and low cost domestic flights.

This living and studying experience in a foreign country will provide the student some skills to negotiate, besides learning a new language. This situation will help the student to take advantage of other candidates when attending to different selection processes and job interviews.

This period in a student's life will allow him/her to explore him/herself, discovering his/her strengths and weaknesses, in order to face his/her challenges and to solve his/her problems.

This experience will take the student out of his/her daily routine to let him/her learning and facing new and different challenges.

When returning to his/her country of origin, the student will realized the improves he/she has experimented both in academic and personal level.

The student will have achieved a lot of skills that would have been difficult to achieve in his/her country of origin. He/she will learn to appreciate material and emotional issues in his/her country, as well as new friendships that will provide him/her the possibility to visit them again in the future.

# 4. STUDENT PREREQUISITES

# 4.1. Legal requirements: Erasmus+ Regulatory framework

To be allowed to make the exchange, students must be taking their studies or, at least, have finished them within the last year in any of the centers that are part of the project. It is allowed that selected students may come from associates of the origin center, as long as the rest of the requirements are met.

Age of majority. Selected students must be over 18.



# 4.2 Academic requirements proposed

#### 4.2.1 Academic level (VE)

Students who take part in the exchanges should be forest vocational teaching students, preferably currently studying Vocational Education or who have completed their studies before the previous semester to the exchange.

#### 4.2.2 English level

To participate in this Erasmus+ exchange program it is highly recommended to have reached an accredited B1 English level and ideally a B2 certificate. It is considered virtually impossible for students will be able to follow the material without having a good knowledge of the technical terminology. Thus, exchange students must prove linguistic aptitude, and especially a good command of the vocabulary related to the Learning Outcomes they are willing to attend at the receiving school. To this effect, students must become proficient with the vocabulary of the respective lessons. This can be accomplished by following the instructions in the Glossary Practice part of each Lesson (e.g. <u>http://cd.dictyon.net/lesson/Safety-essentials-when-working-in-and-out-of-the-forest-10</u>, <u>http://cd.dictyon.net/lesson/Lesson-1-Stand-up-to-live-100-4</u>, etc.) and passing the Test Yourself section of the corresponding Chapter of the Forest Worker's Online Training Tool (e.g. <u>http://cd.dictyon.net/test-yourself/2</u>, etc.).

#### 4.2.3 Recipient country language level

Although it is not required any evidence of the host country language level, it would be desirable a minimal knowledge of it. The receiving school may request that the students prove their proficiency and may ask students to take a language test before leaving their home-country institution.

#### 4.2.4 Other requirements

**European Chainsaw Certificate (ECC).** This requirement is not essential in some countries to work in forestry so it could be just required to that students who obtain it with their studies.

**Driver license.** Exchange students must have a driver license in their country, approved for the rest European countries, at least for the destination country.

**Host country language.** It would be desirable, but not essential, that exchange students have some basic knowledge of the destination country language, at least, when the exchange is made through receiving associates whose English level may not be so advanced. For example, if visiting students participate in an internship program, and they are scheduled to obtain on-the-job training with a non-native English speaking contractor, it would be helpful to be able to understand some of the contractor's native language to maintain the communication going. In cases where communication in the native language or English is not possible, it is proposed that a native student be included in the team and will act as an



interpreter. This student, with a minimum English level, will also act as a guide to visiting students during their stay in the destination country. This is a mutually beneficial situation, where visiting students will have the opportunity to communicate in the work environment and understand the work process, whereas the local students will have the opportunity to practice their English. Most importantly, a long-lasting friendship and perhaps professional relationship will hopefully develop between visiting and local student(s).

The above requirement for local student interpreters/guides is relaxed if the exchange is done through vocational training schools, assumed to have fluent English teachers well trained in the technical terminology.

# 4.3 Previous Exchange Works

Selected students must complete a training program run by the destination country tutor and it will be mainly related to the activities and to the equipment they are going to work with in this country.

In addition, it is proposed that all selected students will perform the activities listed in the FWOTT tool, before their transfer to the destination country. It is set a prior 2 months period before the visit, to do the tests and the tool activities.

In case of countries, such as Spain, where working with heavy forest machinery is not allowed without a certificate, it is proposed to teachers make a basic training / information about the topics during the exchange.

# Development of a student guide about destination country (See corresponding annex)

Destination country tutors will make a student guide which includes the main information about their future stay in the country, especially, those related to their integration and knowledge of the destination center and its area of influence. This guide will complete the information that can be found in commercial and travel guides. It will be referred to forest area where the students will be and the works they are going to develop there.

# 4.4 Exchange Student Selection

Call for exchange students selection will be advertised in the educational center website throughout tutor's communications of the involved groups allowed to participate in the program, in addition to posters in the center. Call dates and deadlines shall appear on the different communications detailed above.

Those interested in participating in the program should send a motivation letter or Personal Statement incoming to the department provided that they meet the required prerequisites.

The department in charge of the Erasmus+ program in this center will be responsible for deciding selected applications, taking into account points presented above.



The number of exchange students will be selected with a reserve list to replace initially selected students, in case they are not allowed to attend.

Given the importance of selected students can finish their training and exchange in another country, once selected, it will be required to them some kind of commitment that force them making the exchange or at least, in case of giving up, the exchange can be done by another partner on equal terms.

For a proposed list of Selection Criteria, see Appendix 4.

# 5. VIRTUAL MOBILITY

The purpose of Virtual Mobility in a student exchange program is to prepare and support the student for what is coming up during the Physical Mobility stage. This preparation is usually called <u>Instructional scaffolding</u> and involves a) segmentation of the educational material to manageable chunks, and b) providing the necessary support, tools and methods to tackle successfully each one.

# 5.1 Instructional Scaffolding in the Tools for Skills

From accounts of Tools for Skills exchange students and receiving school instructors, English and the relevant terminology continues to be the top obstacle in effective student communication and knowledge transfer. Pre-teaching the technical vocabulary necessary to cope with the course taught entirely or mostly in English is perhaps the greatest contribution to the success of student exchange programs. Students should cooperate closely with teachers early on in the virtual mobility stage to develop effective scaffolding strategies (e.g.

https://www.edutopia.org/blog/scaffolding-lessons-six-strategies-rebecca-alber).

Relatively early in each Lesson of the Forest Workers Online Training Tool (Learning Tasks section) students are asked to resolve terminology issues they may have by preparing a list of unknown words, looking them up in the Forest Machine Operators Glossary (<u>http://fmog.dictyon.net/</u>) and discussing the unknown words in the class before proceeding with the rest of the assignments. This is followed by the discussion of the material from the "Working in Harvesting Teams" text and the Case Studies, both of which provide additional opportunities for comprehension and practicing the technical terminology. The structure is completed by the Glossary Practice section, including a List of Terms, Raw Repetition and Spaced Repetition drills, and is concluded with the Vocabulary Review section which refers to the entire Chapter.

Virtual mobility can take place under two sets of circumstances: in-class learning and self-paced learning. The difference between the two is that the former one imposes a learning schedule that the student must follow, whereas the second one provides more freedom so students can decide their own learning schedule and pace.

The risk with the self-paced learning is procrastination: students may prolong the implementation of their learning schedule to the point that they will never



accomplish their objectives. This is the reason why only <u>5% of students who register</u> for online courses complete the courses and receive their degree.

# 5.2 Set Learning Objectives

For effective learning, Learning Objectives must be SMART, i.e.:

Specific Measurable Attainable/Active/Ambitious Relevant/Results-Oriented/Realistic, and Time-framed

(<u>https://www.youtube.com/watch?v=\_woMKwBxhwU</u>).

Learning Objectives usually describe trainee performance rather than trainer performance (<u>http://usagso-sg.tripod.com/22\_learning\_objectives.pdf</u>).

Typically, a SMART Objective starts with the phrase: "By the end of this course, students will be able to ...".

The "Can Do" section at the start of each Lesson of the Tools for Skills Online Training Tool (<u>http://cd.dictyon.net/</u>) describes what learners will be able to do after completing the Lesson. The objectives are clearly stated and:

- 1. Specific to each Lesson, as no two Lessons have the same objectives
- 2. Measurable; progress is assessed using the drills and exercises in each Lesson
- 3. Attainable as in most cases objectives are followed by an action verb
- 4. Relevant/results oriented, and
- 5. Time-framed as their achievement is set at the completion of each Lesson, which usually takes one week. Students may review the material throughout the semester for long-lasting learning.

# 5.3 Learning Strategy

To set their SMART learning objectives and thus define their Learning Strategy, students should ask themselves the following questions (<u>https://uncw.edu/career/documents/WritingSMARTLearningObjectives.pdf</u>):

- ✓ What do I want to accomplish (the big picture)?
- ✓ Why am I doing this?



- ✓ Am I motivated for it?
- ✓ Am I committed to it?
- ✓ When will I accomplish what?
- ✓ Where will I accomplish each part? In the field, in classroom, in workshop, in the library, in my room?
- ✓ How am I going to accomplish my objectives?
  - What steps or actions will I take?
  - What activities will I do?
  - How will I acquire the knowledge/learning?
  - Under what conditions will learning occur?
  - How often and how long will I be studying?
- ✓ What are the learning tools I will use?
  - Do I know how to use them?
  - ◆ Have I used them before?
- ✓ How am I going to measure my progress?
  - What evidence will I use to measure my learning?
  - How often am I going to measure my progress?
  - When will I measure my progress?
  - What criteria will I use to evaluate the evidence?
  - Who will do the evaluation?
  - What guarantees do I have that the evaluation will be objective and the results will be reliable, i.e. will not deviate too much from the ones from actual exams?

The above learning objectives apply equally well to the five language learning skills (reading, writing, speaking, listening and vocabulary), but they have to be customized for each one. Table 1 below shows an example of how to customize the learning objectives for each of the five language learning skills.



	READING	WRITING	SPEAKING	LISTENING	VOCABULARY
What do I want to					
accomplish?					
How am I going to					
accomplish my objectives?					
What steps or actions will I					
take?					
What activities will I do?					
How will I acquire the					
knowledge/learning?					
Under what conditions will					
learning occur?					
What learning tools do I					
have?					
Do I know how to use					
them?					
Have I used them before?					
How am I going to					
measure my progress?					
What evidence will I use to					
measure my learning?					
What criteria will I use to					
evaluate the evidence?					
Who will do the					
evaluation?					
How often am I going to					
measure my progress?					
When will I measure my					
nrogress?					

#### Table 1. Customized Learning Objective plan by language skills



Obviously, a learning strategy where progress is monitored once or twice throughout the semester or too late, e.g. just before the final exams, will not be very effective; it will not detect performance defects on-time and thus it will not allow time for the necessary learning adjustments. Therefore, it is recommended that studying starts and progress is monitored as early and as frequently as possible, for example, every week or at the end of each lesson, whichever of the two provides more testing opportunities in the semester.

The important point, however, in the overall learning strategy is the contingency plan, i.e. how do I change my learning approach if my previous one fails at some point (see 5.5.1 Exchange student contingency study plan, below).

Essentially, students that failed to accomplish their objectives must take some time for troubleshooting the possible causes of their failure.

Before starting an introspection/troubleshooting session, students are urged to review the general studying guidelines in section APPENDIX 1 - LEARNING HOW TO LEARN – WHAT THEY SHOULD HAVE TAUGHT YOU IN SCHOOL, BUT DIDN'T (in <u>How</u> to use the Forest Workers Online Training Tool in a teaching situation).

Here are some troubleshooting questions struggling students need to ask themselves:

- What went wrong?
- Did I follow the general studying guidelines?
- Was the failure on a specific skill (e.g. reading, writing, listening, speaking, vocabulary) or was it a generalized one?
- Am I sufficiently motivated?
- Am I bored or disengaged?
- Am I distracted by something or someone?
- Do I study in a smartphone/distraction-free environment?
- Did I have a problem with the teacher or other training personnel that hindered my learning process?
- Have I missed something from the lectures due to my poor note-taking and information processing/assimilating after the lecture(s)?
- Did I have enough sleep the night before the exam?
- Do I have appropriate dietary habits?
- Do I exercise frequently?
- Do I need to change my style of studying from brute force to smart study?
- Do I need to study more hours, more frequently or in shorter regular intervals?



- What other learning tools/resources/software/techniques can I use?
- What other learning help can I get (learning coaches, peers, etc.)?
- Would it help me to study in a group environment or by myself?
- Was the failure a temporary effect, e.g. a particularly difficult or tricky test or a tough teacher, or a permanent one (a repeat failure)?
- How did the rest of the class do on the test?

Of course, each one of the above questions has a second and third follow-up which are "Why" and "How do I change that", respectively.

The above list maybe form the basis of discussion between advisor and student in case the latter opts to seek advice. To maximize effectiveness by leveraging ownership (See Use Learning Ownership, Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.) however, it is recommended that students ask themselves the above questions and draw their own plans.

# 5.4 Learning Tools

Active learning Creative learning Project-based learning Glossary Practice section of each lesson Rote repetition Spaced repetition Flash Cards Memorization software (Anki, Quizlet, etc.) Mnemonics Group learning Brainstorming Motivation and Incentives Student learning coaches Forest Machine Operators multimedia-multilingual Glossary (http://fmog.dictyon.net)

The use of the above tools is described in section LEANING TOOLS (HACKS) of the Chapter "<u>How to use the Forest Workers Online Training Tool in a teaching</u> <u>situation</u>". Numerous examples and case studies of their application can be found on the web, whereas the Forest Workers Online Training Tool provides many opportunities for their application.

Some of the above tools are modernized versions of older tools; for example, the spaced repetition Anki tool is just the ICT version of the low-tech Flashcards. The Anki tool offers a sophisticated algorithm for repetition, but requires the use of a PC, laptop, tablet or smartphone. In contrast, flashcards have a very simple algorithm of manually shifting through the cards, but have the advantage that they can be used



anywhere, anytime and they can be flipped in either direction (English to the native language and vice versa) without any modification of the existing stack of cards.

The question is how to start studying and which tool(s) and/or method(s) to use first.

Obviously, there is no single or straightforward answer to the above question. Learning is a highly personal process and can be confined in no rules or recipes. Severe criticism has been expressed recently on education/schools killing creativity and thus learning

(<u>https://www.ted.com/talks/ken\_robinson\_says\_schools\_kill\_creativity/up-next</u>). Each student is free to select the tools and/or methods that best suit his/her personality, experience, subject of study and objectives and to experiment with them to maximize his academic performance. These tools are self-explanatory and fun to use and their learning curve is not too steep. Students who did not have previous exposure to these tools may need to start their preparation earlier during the virtual mobility stage.

# 5.5 Metacognitive Learning Strategies

Metacognitive strategies are methods used to help students think about their thinking process and understand the way they learn

(<u>https://inclusiveschools.org/metacognitive-strategies/</u>). The implication is that if students have a good learning plan, including clearly defined goals, a good understanding of their learning process, and regularly monitor their progress by benchmarking their results against their set goals, they can identify their learning weaknesses and intervene to adjust their learning pace.

Essentially, metacognitive strategies are summarized in the motto "thinking about thinking" or "learn about learning" and they can be developed by asking oneself the question

• "how can I change my learning approach to catch up, if at any point in time I fall short of my goals"?

Metacognitive strategies consist of two parts (<u>https://prezi.com/idxbsfwrghfa/the-role-of-metacognitive-strategies-in-reading-comprehension/</u>):

- Knowledge about someone's learning strengths and weaknesses, and
- Awareness of comprehension and task performance

#### 5.5.1 Exchange student contingency study plan

Students that did not perform very well, despite having drawn up a clearly defined learning plan, and willing to improve their academic performance, should take a series of steps, such as:



- 1. Ask themselves what went wrong, why and how can they fit it?
- 2. Check their motivation level, study style and frequency, eating, sleeping and exercise habits, self-testing frequency and relevance, etc.
- 3. Eliminate learning distractors (see LEARNING DISTRACTORS in "<u>How to use</u> <u>the Forest Workers Online Training Tool in a teaching situation</u>")
- 4. Promote learning enhancers (see LEARNING ENHANCERS in "<u>How to use the</u> <u>Forest Workers Online Training Tool in a teaching situation</u>")
- 5. Seek other available help (e.g. peer instruction, etc.). Sometimes students asking classmates for help may have spectacular results because students can relate more to their peers and ask things they would never dare ask their teachers. Moreover, lateral transfer of knowledge (from student to student) provides accelerated learning due to similarity in the ways of thinking, common interests, etc.
- 6. Think Out of the Box use innovative study and learning methods, such as studying anywhere, anyplace, making associations in funny or even bizarre ways, invent learning projects, make up learning stories, organize brainstorming sessions, learning competitions or games with fellow students, etc. (see LEARNING TOOLS (HACKS) in "How to use the Forest Workers Online Training Tool in a teaching situation").
- 7. Use Learning Ownership; if students feel they own their learning or the information in the educational material or a Lesson or a Chapter, their interest grows and so do their efforts to master it; therefore, their chances of success are multiplied.
- 8. Modify the Learning Plan accordingly.
- 9. Apply and test the modified Learning Plan.
- 10. Repeat, if necessary, and
- 11. Refine to success.

# 5.6 Metacognitive Teaching Strategy

Teachers should also investigate and provide assistance to students that did not manage to achieve their learning objectives and enhance their academic performance.

- Teacher investigates the type of knowledge the students are most likely to obtain and modifies teaching method accordingly.
- Use (in-class) formative assessment tools, such as good use of smartphones, tablets and ICT, student whiteboards, alternative teaching methods, and software, such as Kahoot (<u>https://kahoot.com/</u>), Socrative (<u>https://www.socrative.com/</u>), etc. for on the spot assessment of student understanding of the introduced concept(s), and use the results of formative assessment to adjust teaching methodology, if necessary (see Judith Dodge: 25 Quick Formatting Assessments for a Differentiated Classroom,

http://www.somersetacademy.com/ourpages/auto/2014/4/29/48268612/ 25%20Formative%20Assessments.pdf.)





- ✓ Download the Metacognitive Awareness Inventory from <u>https://services.viu.ca/sites/default/files/metacognitive-awareness-inventory.pdf</u> and ask students to answer the questionnaire therein.
- ✓ Total the score for each category and place it in the respective box.
- ✓ Use Table 2 below to draw up the appropriate teaching approach.

				Students can
		Questions that		obtain
Type of		can be		knowledge
knowledge	Description	answered	Requirements	through
	Facts required before learner is		Knowing of someone's skills	Presentations Demonstrations
DECLARATIVE	able to apply critical thinking to	Who, what, about, that	resources and abilities as a	Discussions
	the problem		learner	
PROCEDURAL	Knowledge applied for understanding a process or	Ноѡ	Students must know the process and when to apply it	Discovery Cooperative learning Problem solving
	procedure			
CONDITIONAL	Knowledge about under which circumstances	When, why	Application of comparative and declarative	Simulation
	processes or skills apply		knowledge under certain conditions	

**Table 2.** Teaching methodologies suitable for obtaning specific types of knowledge.

If nothing else works, what other chances can teachers give to improve student academic performance? In most cases, a homework paper or project is the means to close the gap between expected and actual academic performance. In the case of forest workers, probably a wood harvesting or a timber forwarding or a log sorting project may offer the much sought academic performance cushion.

# 6. PHYSICAL MOBILITY

There is large number of variables affecting the cooperation and exchange of students among schools.

For example, how many schools are in the consortium, which learning outcomes does each school offer and when, how is the course organized on a time scale (one semester, two semesters, four semesters, etc.).

Here we will attempt to provide some examples of efficient student exchange, i.e. exchange where waste time is minimized and number of exchange students or schools maximized.



### 6.1 Assumptions

- 1. All consortium schools operate on a 15-week semester (e.g. September through December and January through April), with one week off for spring break, and one week off for student preparation for the final exam, intervening holidays, etc.
- 2. Schools operate on a 5-day week schedule.
- 3. Classes in the receiving institution are either entirely in English or a bilingual environment, i.e. both a native language technical teacher and an English language simultaneously in the same classroom or in the field.
- 4. School curricula are organized based on the four Learning Outcomes (see <a href="http://cd.dictyon.net/ECVET-7">http://cd.dictyon.net/ECVET-7</a>).
- 5. All schools teach all four Learning Outcomes in one semester, but the sequence of Learning Outcomes may vary.
- Both sending and receiving schools have developed the coursework and the learning material based on the textbook "Working in Harvesting Teams" (Vol. 1 and 2) and using the Forest Worker's Online Training Tool (<u>http://cd.dictyon.net/</u>).
- 7. The receiving schools can receive students at any time throughout the semester (see <u>APPENDIX 2 RECEIVING SCHOOL RESOURCE AVAILABILITY</u> <u>CHECKLIST</u>, below).
- Exchange students have a basic knowledge of everyday spoken English (B1/B2 level) and a proven knowledge of the technical terminology (see <u>4.2.2. English level</u>, above).
- 9. Teachers have had the opportunity to become acquainted with the students and assess the potential of prospective students to successfully complete the exchange program.
- 10. Exchange students will stay at the receiving country for 4-6 weeks. Therefore, they will either take 1 or 2 Learning Outcomes. Four weeks is a little over the required time for one Learning Objective, but the students may take the extra week for some cultural readjustment or sightseeing. On the other hand, six weeks is just enough time to take 2 Learning Objectives, and leaves no time for sightseeing. Students wanting to become better acquainted with the local people and culture may seek to extend their staying, but they will have to supply their own funds and accommodation. They may inquire with the receiving school about accommodation details (dorm vacancies, restaurant capacity, duration of stay and cost).





11. At the end of their visit and before returning to their home-country, visiting students will be required to proof that they have mastered the corresponding material.

### 6.2 The Exchange

We will examine three different scenarios, depending on how many schools participate in the Consortium and how the learning outcomes are arranged over the semester. The scenarios are one-way exchange cases, i.e. students from the sending school will visit one or more receiving schools, whereas the opposite, i.e. students traveling from "receiving" schools to "sending" schools, although highly desirable is not examined here.

#### 6.2.1 SCENARIO 1 – TWO-SEMESTER EXCHANGE PROGRAMS

This is the easiest and most popular case of blended mobility programs spanning two semesters. It does not require curricula synchronization and offers the highest flexibility. In the first semester, prospective exchange students make all preliminary arrangements, prepare themselves in their home country (virtual mobility) and apply to the receiving school, while during the second semester, they travel (physical mobility) to the destination, if their application is accepted.

Depending on student demand for attending a certain receiving institution, there may be some time lag for the physical mobility. In other words, the two semesters may not be contiguous but there may be an intervening time between the virtual and physical mobility. Prospective exchange students do not necessarily travel to the destination country immediately after they complete all prerequisites and formalities, but may wait one or more semesters. It is possible, for example, for students to graduate in the Spring semester, wait through the summer, and travel to the destination country the following Fall or even Spring semester. It is well established that long waiting times lead to memory fading and forgetting a significant part of the information (technical material and terminology) learned. If that is the case, students can refresh their memory by using the self-paced and comprehensive Forest Worker's Online Training Tool (<u>http://cd.dictyon.net</u>) and other learning/memorization tools contained therein, as well as the Forest Worker's Glossary (<u>http://fmog.dictyon.net</u>)

#### 6.2.2 SCENARIO 2 – ALIGNED SCHOOL CURRICULA

Two synchronized schools, i.e. schools sharing the same learning outcomes arranged in similar sequence over one semester. One school acting as the receiving and the other as the sending school.

In this case, students of both schools share the learning outcomes while at home. Prospective exchange students, however, are willing to visit the other school to do perhaps their field work, i.e. because the receiving school may have some resources (e.g. simulators, forest harvesters, forwarders, experimental setup for precise wood



volume measurement, better prospects of employment, etc.) lacking from their home-country school.

The proposed timeschedule of the exchangebetween two schools with aligned curricula is shown in <u>APPENDIX 5 – SAMPLE OF SCHEDULED DAILY ACTIVITIES</u>.





Legend



Figure 2. Time schedule of one-way exchange between two schools with curricula arranged for maximum student exchange opportunities.





It was assumed that the receiving school can receive students at any time throughout the semester. Many exchange programs start with student arrival on week 1 or actually about a week before the start of classes. This gives students time to familiarize themselves with and adjust to the new cultural and educational environment. These students usually are part of full semester exchange programs and, therefore, are beyond the scope of the "blended" mobility environment. Furthermore, this option might introduce a long lag time between the completion of work in the domestic school and the physical mobility to a school in another country.

For a more efficient exchange program, and since prospective students are required to finish their respective coursework in their home-country institution before traveling to the receiving institution, it is more realistic to say that students will arrive at the beginning of week 4, 8 and/or 11. For practical purposes, however, it might be advisable to limit the receiving dates on weeks 4 and 11 only. In any case, it is up to the receiving school's discretion to accept students on any date it sees feasible.

Figure 2 shows that the sending school administers the optional linguistic aptitude test. What is not shown in the Figure, however, is that the receiving school has total control and is responsible for grading the test and giving its permission for the exchange based on the results of the test.

From Figure 2, it can be seen that Learning Outcome 1 is the only incompatibility of the pattern; i.e. students will not be able to prepare for it and go to the receiving school to continue with it.

In fact, the arrangement in Figure 2 provides maximum student exchange: students of the sending institution will have the chance to select from up to three Learning Objectives at the receiving school.

One deficiency of the proposed arrangement is that students will have to listen to the same theoretical material twice; once at their home-country school and once at the visiting country. This is not necessarily a defect, as repetition reinforces learning. Young people may find this unacceptable, but the teacher(s) will have to convince them that repetition was necessary to refresh their memory and introduce them to another teaching environment and culture.

Due to the tight schedule, it would be nice to have prospective exchange students complete the preliminary work and paperwork in the previous semester before the physical mobility. This would also give teachers time to decide whether to approve student application for the exchange program.

The Learning Outcome Completion test grade is not the final grade, but a part of the final grade for the course. Some schools may want to keep the exchange program as an independent course having the respective domestic course as a prerequisite, much the same way that a grade for laboratory work is kept separate from the theoretical/lecture performance of the student for the same course.





#### 6.2.3 SCENARIO 3 – MULTIPLE SCHOOLS CROSS EXCHANGE

Four schools, each one of them teaching all learning outcomes, in a non-overlapping arrangement over a one semester course. Three schools act as the receiving schools and one school as the sending one. The coursework is completely out of pace between schools, i.e. the schools offer the same learning outcomes but in different weeks.

This exchange can become quite complex when student, teacher, sending and receiving school requirements, vacancies, out-of-sync class offerings, resource availability and other important constraints are taken into consideration. Currently, there is no overall matching algorithm for finding a compromising solution among these often conflicting requirements. The development of a matching algorithm and an application yielding the best possibilities for all stakeholders would be interesting and would greatly facilitate future student exchanges, particularly in case where demand exceeds supply of exchange positions.

The solution developed following negotiations between individual schools and implemented in the Tools for Skills project can be seen in Table 5 below.

#### 6.2.4. Welcoming & Adaptation/Orientation week

Although the title mentions a week, the actual duration maybe extended or shortened, depending on exchange student time and budget and receiving school resource availability. In any case, orientation should be no less than 2-3 days.

The purpose of welcoming is to absorb the cultural shock to the exchange students and to provide them some time to become acquainted with the new educational environment, rules, customs and traditions of the receiving country.

During this period, students may be excused from classes and may take time to familiarize themselves with the campus, the facilities, the daily routines and time schedules, available educational resources, internship and job placement opportunities, and fellow students. During this time, visiting students participate in a variety of social events and try to collect as much information as possible, such as entertainment options, peer instruction, communications, future employment opportunities, etc.

This is a vital period that can have a long-lasting impact on visiting students and may decide the success of the exchange program. Both the sending and the receiving schools should keep in mind that visiting students do not have the option to drop the course if they don't like it; thus, students have no way out and may feel trapped for the rest of the exchange period. This, in turn, can put the students under unnecessary stress, disengage them and affect their academic performance or increase their resistance to the course. Thus, it is crucial to make the transition as smooth as possible, and the orientation week as attractive as possible, for the visiting students.

The receiving school shall prepare a time schedule summarizing student activities during the exchange time (for example, see <u>APPENDIX 5 - SAMPLE OF SCHEDULED</u> <u>DAILY ACTIVITIES</u>, below).



This time schedule will be sent to tutor of origin and students one month before the exchange, at least, in order to inform them about the exchange goals, tasks description, students' rights and obligations in the destination country, etc.

This program is proposed to be adjusted to future reality, as much as possible, even though, we are aware that the circumstances may lead to changes in those programs that should be understood by students.

#### 6.2.5 Field work

A challenging task of exchange programs is to provide students the opportunity for field work and particularly for practical training in a real work environment. This can be done in a number of ways, all of which are very conducive to learning and suitable to the requirements of the Tools for Skills target groups:

**Demonstrations** — are practical acts or a show of how something operates or is performed. They can be carried out in the field or in the classroom. In classroom environments, understanding is enhanced when students stop being passive observers, become actively engaged by predicting the outcome of the demonstration and then compare their prediction with the active results of the demonstration (Crouch, C., Fagen, A.P., Callan, J.P. and Mazur, E., 2004. Classroom demonstrations: Learning tools or entertainment?. American journal of physics, 72(6), pp.835-838<sup>3</sup>; Sokoloff, D.R. and Thornton, R.K., 1997, March. Using interactive lecture demonstrations to create an active learning environment. In AIP Conference Proceedings (Vol. 399, No. 1, pp. 1061-1074). AIP<sup>4</sup>). Field demonstrations and shows are used mostly to impress, motivate and engage people. Their most common use is in sales.

**Simulations** — These are imitations of activities, processes and situations in a safe and controlled environment (<u>https://blogs.shu.ac.uk/shutel/2014/07/23/simulationan-approach-to-teaching-and-learning/</u>) aiming to prepare learners about the real world. A major component in any simulation-based learning environment is debriefing, i.e. the reflection on experiences and discussion with others to discover areas of improvement

(https://journals.lww.com/simulationinhealthcare/Fulltext/2007/00220/The Role o f Debriefing in Simulation Based.7.aspx). The advent of technology and the expensive and dangerous circumstances of commercial airline transportation brought the development and application of flight simulators and realistic flight scenarios as learning environments. In addition to immersion learning, simulators offer exciting gameplay, so much so that they became quite popular consumer games (e.g. Microsoft Flight Simulator, SimCity, etc.)

Tools for Skills provides two options for simulation-based learning. The Case Studies, describing a situation and asking students to discuss it and find a solution for it, and forwarder/harverster simluators, where students are asked to familiarize themselves

<sup>&</sup>lt;sup>4</sup> https://aip.scitation.org/doi/abs/10.1063/1.53109



<sup>&</sup>lt;sup>3</sup> <u>https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1202&context=fac-physics</u>

with the controls of a forest machine in a relatively simple and safe learning environment.

**Field trips** — are a tool to take students to see and get a feeling of the "real world" and situations they would not have a chance to experience in the classroom (https://www.explorableplaces.com/blog/the-benefits-of-field-trips). As a result, field trips stimulate student interest, motivation, engagement, grades and understanding, critical thinking skills (http://educationnext.org/the-educationalvalue-of-field-trips/) and tolerance, provide access to tools, instruments and natural environments not available in the classroom, enhanced memory, and help break classroom boredom, disengagement, and structured learning. As such, field trips provide valuable learning experiences (http://www.informalscience.org/newsviews/field-trips-are-valuable-learning-experiences), offer a wealth of information, permanent learning, and life-defining experiences

(<u>https://www.teachthought.com/learning/the-benefits-of-learning-through-field-trips/</u>).

Recognizing the importance of field trips for learning, Tools for Skills organized many field trips (see Appendix 5) for both local and visiting students.

**On-the-job training** — It is a very effective one-to-one trainig method transferring only the necessary information and skipping much of the theoretical background (<u>https://en.wikipedia.org/wiki/On-the-job training</u>). All that it is required for this type of training is a knowledgeable person and the tools for work. A practical example of this is the father-to-son training on the family forest harvester machine tractor or car. The main disadvantage is that knowdedge is passed unfiltered, i.e. good and bad habits of the teacher are transferred to the observing learner.

**Hands-on experience or experiential learning** — It is the process of learning through thinking on doing or, very simply, "learn by doing".

**Internship** — is a short term educational training program at the workplace for students exploring a career path. It typically lasts from one week to one year (<u>https://difference.guru/difference-between-an-internship-and-an-apprenticeship/</u>).

**Apprenticeship** — is a paid training program for future company employees (<u>https://difference.guru/difference-between-an-internship-and-an-apprenticeship/</u>).

The basic differences between Training and Internships are given in the following Table 3 (<u>https://keydifferences.com/difference-between-training-and-internship.html</u>)

BASIS FOR COMPARISON	TRAINING	INTERNSHIP
Meaning	Training is a programme used by most of the companies and big organisations to improve	An Internship is a type of training in which the students of various colleges and

Table 3. Comparison between Training and Internship



BASIS FOR COMPARISON	TRAINING	INTERNSHIP
	the skills, performance ability of the employees for doing a specified job.	universities get the real world experience about the workplace for a limited period of time.
For whom	Employees and Prospective employees.	Students
Duration	Depends on the company or an organization, but normally more than 6 months.	2-3 months.
Objective	Improving the employees performance and productivity.	Gaining practical knowledge.
Payment	Training is always paid.	Internship may or may not be paid.

On the other hand, the differences between Internships and Apprenticeships are given in the following Table 4 (<u>https://keydifferences.com/difference-between-apprenticeship-and-internship.html</u>).

BASIS FOR COMPARISON	APPRENTICESHIP	INTERNSHIP
Meaning	A training program conducted in an industry or undertaking where the trainee gets a chance to learn and earn at the same time is known as apprenticeship.	An internship is a training program whereby the college students get a chance to work in the respective field and gain real world experience.
What is it?	Work based training	Work based learning
Time Duration	Long	Comparatively short
Provided to	Potential employees	Students
Part of	Vocational Education and Training	May or may not be a part of formal education.
Trainees	Apprentices	Interns

Table 4. Comparison between Apprenticeships and Internships



BASIS FOR COMPARISON	APPRENTICESHIP	INTERNSHIP
Training ends with	Job to the employee	Experience to the employee
Pay	Always paid	May or may not be paid
Orientation and Induction	Yes	No

#### 6.2.6 On-boarding

On-boarding refers to the welcoming of the newcomer or visiting students to the work environment. Thus, on-boarding is not under the direct or exclusive control of any of the four stakeholders involved in an exchange program (see Figure 1), but it mostly depends on the contractor. Contractor benefits of using students are a) an opportunity to fresh potential talent, and b) access to non-skilled employees with little or no experience.

Whether exchange students will be allowed or not to do field work under a contractor in a real work environment depends on a number of factors such as: negotiations between receiving school and the contractor to ensure that the contractor will accept students, specific workload assigned to students, terms and length of employment, student qualifications and previous experience, local employment regulations, and weather conditions. Obviously, the contractor has the right to put the students in a probation/test period just to see firsthand what the students are capable of.

#### 6.2.7 Activities report

Beyond the acquisition or implementation of the new knowledge, the exchanges are intended for students to acquire a vision of the socioeconomic context they are going to unfold in a next future, the exercise of their profession and/or the forest sector reality in the host country, as well as the context where the activities are developed.

Since the implementation of the exchange, the student must do a practice plan (results), in which he/she should be able to analyze the activities done (analysis and discussion) and to submit some conclusions, too.

An explanatory report, conducted by the student, about the activities performed on the exchange during his/her stay abroad.

This report must be submitted on CD-ROM to the country of origin tutor as soon as possible, reporting a copy and/or discussing the issues contained with the destination country tutor, in order to correct some deficiencies, and/or improving next exchanges.

As an example, the activities report should have the following structure:



#### a) Student data

Student personal information: (name and surname, ID number, address, phone number, etc.)

Student academic information: (school, degree, course,...)

#### b) Description of the host company

Center or company information

Company's identifying data: (name, address, phone number, fax, e-mail, etc.), company economic activity, number of employees (approximate), company belonging to a business group and other relevant aspects.

It has also be noted in which department, service or area the stay of the student has taken place, which are its functions and the people who have had been related with the student.

#### c) Initial objectives description

Development of the initial working plan proposed for the realization of the practice.

#### d) Daily activities

It contains the development of the work made.

It should give clear information about the projects in which the student has been involved in the company, the activities carried out during the student's stay in the company, approximate duration of each one of the activities as well as the time spent on each.

Additional explanations, ratings and comments about the activities should be included, too.

The description of the activities must be accompanied, in any case, by documentation including:

- Activities photos.
- Machinery and means used.
- Charts, diagrams or flowcharts of the activities.
- Additional relevant documents.

#### e) Conclusions

This section should include those professional and personal aspects about the acquired knowledge the working atmosphere, the responsibility for decision-making among the team, relationships with tutors.

Conclusions may contain any useful comment or constructive critic.



# 7. BLENDED MOBILITY

### 7.1 Definition Overview

The concept of Blended Mobility was defined above (see p. 2). However, there are several issues and obscurities to this definition.

- 1. It is not clear whether the definition refers to full courses or partial courses or courses taken remotely through ICT. In many cases, however, including the Tools for Skills project, it has been assumed that the definition includes parts of courses.
- 2. How will it be ensured that the students are sufficiently prepared and able to follow the coursework in the receiving institution without any major set backs due to language or other foreseeable difficulties.
- 3. Regardless of whether students take full or partial courses, there is the problem of academic performance assessment and credit equivalence and transfer between institutions: Who and how will make sure that students have learned what they were supposed to, which institution will award the earned credit for the full or part of the coursework, and that the receiving and sending institutions have similar academic standards, requirements and grading policies.
- 4. How will it be guaranteed that any tests were not culturally biased, and thus they are reliable means of academic performance evaluation, and there were no cases of academic dishonesty, etc.
- 5. Efficient program operation. Prospective exchange students should be able to visit the school to learn the material of their choice in an orderly and defined way. This requirement imposes that
- 6. From a purely logistics viewpoint, issues of student travel, insurance, adequate workshop and accommodation facilities must be settled before receiving, as well as sufficient funding allowing for the successful completion of the exchange.

# 7.2 Tools for Skills and Blended Mobility

The Tools for Skills project is an example of a blended mobility project. In the virtual mobility part, exchange students use the common educational material, comprised of the textbook "Working in Harvesting Teams", the Forest Workers Online Training Tool, and the Forest Machine Operators Glossary, to prepare for the physical mobility, which usually lasts 4-6 weeks in a Consortium partner institution.





The Erasmus+ program is an equal opportunity program, meaning it does not discriminate on the basis of sex, race, ethnic origin, physical disabilities, genetic features, socio-economic status, language, religion or belief, political position or opinion, membership to a minority group, without being limited, to target groups (students or trainers) underrepresented in the Erasmus+ program, namely individuals with special needs or disabilities, from lower socio-economic backgrounds, with family responsibilities or part-time jobs, etc.

To facilitate students and staff from groups underrepresented in exchange programs, the Erasmus+ program urges European Higher Education Institutions to provide supplementary support, such as top-up funds, appointing/hiring special academic advisors, developing special teaching/learning methods targeting the specific needs of these individuals, etc. (European Commission, 2016. "Erasmus Charter for Higher Education 2014-2020. Annotated Guidelines", p. 4)

The vocational English training is intended for students or trainers who would like to obtain knowledge and skills that will improve their employability, but missing from their home educational institution, probably due to lack of resources. For example, forestry students from Spain might travel to a Swedish, Finnish or German vocational forestry school to be trained on forest harvester simulators, which are missing from their home school due to their high acquisition cost, or because there is a limited number of forest harvesters operating in Spain.

Currently, the cost of low-end forestry simulation software is very reasonable (several simulator games are on the market for less than 20 Euros each) and the system requirements fall well within the standard specifications of most personal computers. The cost of a professional harvester simulator (hardware and software), however, may run in the tens of thousands of Euros, and hence not many schools can afford to own a harvester simulator.

Of course, this comparison between game and professional simulators may seem exaggerated, as the former are purely entertainment systems, whereas the latter are considered an investment in maximizing forest harvester productivity and minimizing losses from unskilled operation of an expensive machine. There is reason to believe, however, that many young people become obsessed by the play action and immediate gratification of game simulators and decide to become professional forest harvester operators. A young person, however, should never be trusted to operate any piece of forest machinery just because of the level of dexterity in a game simulator.

From a cross-country point of view, student exchange programs are an opportunity for a transfer of knowledge between educational institutions of different European countries. Meeting other people and becoming acquainted with the culture of the receiving country is an additional factor of exchange programs that acts synergistically towards European integration. Cultural exchange comes in the form of interaction with the local population or socializing with other exchange students from other countries that happened to be at the same school at the same time. Finding the balance between studying and meeting people may take some time, which varies between individual students.





Blended mobility has some drawbacks and advantages compared to full exchange programs. For example, in full exchange programs prospective exchange students or trainers have to find the school they would like to go to, examine its course descriptions, course timing, prerequisites, etc. and select the ones fitting individual student interests and budget, coordinate with their home-country school about credit transfer, register, make travel, accommodation and insurance arrangements, attend classes, take the exams, receive grades from the faculty of the receiving institution, and then transfer the credit to their home school. The details for transfer of credit must have been agreed between the respective Higher Education Institutions before the exchange and may not the subject of a formal bilateral agreement between the schools.

In contrast, blended mobility students maintain their active enrollment in the educational institution of their home country, but take a 4-6 week "leave of absence" to attend another school in the receiving country. Their home training institution is responsible for administering the tests/exams, and for awarding the final grade and any credits thereof. Hence, blended mobility requires a much closer cooperation and coordination between the educational institutions of the sending and receiving countries in order to:

- a) ascertain compatibility and/or complementarity of the offered courses in the two institutions. For example, cooperation and exchange between forestry schools may be superficially intuitive and easy, until the schools discover that their curricula are significantly different: one of them may be oriented mostly towards environmental conservation, silviculture, phytopathology and forest fires, whereas the other one towards reforestation, mechanized forestry and forest machine operator training. In this case, student exchange can become a challenging issue requiring concerted efforts to bridge the gap and find compatibilities between the curricula. Diversity, however, is not necessarily detrimental to cooperation or exchange of knowledge; on the contrary, complementary subjects may broaden the learning and employment horizons, stimulate student interest in areas not immediately obvious at the outset of the program, and advance trainer and trainee exchange.
- b) agree on which courses or parts of courses taught or activities carried out in one school will be accepted by the other.

Precise timing and a well-planned syllabus is required, so that students can schedule their visit by knowing beforehand when each chapter of the course will be covered. The syllabus will provide further required information, such as student academic performance evaluation, and how many credits to transfer between institutions. These issues should be concluded with a formal Inter-Institution Agreement, whereas some of the more general issues of credit transfer have been resolved in the ECTS User's Guide (http://europass.cedefop.europa.eu/sites/default/files/ects-users-guide\_en.pdf).

Early on in the "Tools for Skills" project, the consortium of partners agreed on the common training material, which included three main areas:



- 1) the Forest Workers Online Training Tool, containing the language and soft skills students should have acquired after completing the program,
- 2) the Forest Workers Online Glossary, with the technical terminology vocabulary to be mastered by the students, and
- 3) the ECVET Learning Outcomes (http://<u>cd.dictyon.net/ECVET-7) conta</u>ining the common technical and social skills.

Some preliminary efforts have been made in organizing the curricula and preparing a detailed program of daily activities. These samples are included in Appendix 5.

The Erasmus+ "Tools for skills" program for students of Vocational Education considers the possibility of making student exchanges with the own funds of the project, to reinforce or to show some other points of view and some other forest management systems.

Students mobility will take place in some periods set out within the project.

The students will achieve some goals related to operating heavy machinery training and English language learning within the forest sector since this sector has globally large gaps in both areas. The students stay, depending on the host country, will take place in companies and/or in educational institutions. The stay at these destinations will be proposed by the partners of each recipient country, taking into account the project general goals.

### 7.3 Duration, purpose and mobility dates

Mobilities granted will consist in different stays for X days periods in an educational institution or in a company. The main work of the student will must consist in the exploitation of the performed activities as well as learning about their procedures in order to incorporate them in the development of their future careers. Mobility dates will be included in the following periods:



								# OF
							REQUIRED READING FROM THE	ASSOCIATED
SENDING	RECEIVING	NUMBER OF			NUMBER	LEARNING	BOOK "WORKING IN HARVESTING	TECHNICAL
COUNTRY	COUNTRY	STUDENTS	FROM	то	OF WEEKS	OUTCOME	TEAMS"	TERMS
FINLAND	SWEDEN	2	7NOV2016	21DEC2016			Book 1, Chapter 6: Care of the	134
SPAIN	SWEDEN	2	23NOV2016	21DEC2016		ECVET HARVESTER	machine (pp. 6:1-6:28)	
SPAIN	SWEDEN	3	80CT2016	5NOV2016		<u>8</u>	Book 2, Chapter 1: Harvesting	209
FINLAND	SWEDEN	3	5NOV2016	17DEC2016		FORWARDER	forests (pp. 1:1-1:88)	
FINLAND	SWEDEN	2	11JUN2018	6JUL2018		IONWINDER	Book 2, Chapter 2: Forwarding – Basic concepts (pp. 2:1-2:33)	47
BULGARIA	SWEDEN	3	21MAY2017	19JUN2017			Book 1, Chapters 1-5: Work safety,	70
BULGARIA	SWEDEN	2	3APRIL2018	28APRIL2018		<b>ECVET</b>	The work environment, The	26
SLOVAKIA	SWEDEN	2	3APRIL2018	28APRIL2018		<b>ENVIRONMENT</b>	machine operator, responsibility,	14
						MANAGEMENT -	Communication (pp. 1:1-5:14)	21
CDAIN		4	240012010			<u>GENERAL</u>		30
SPAIN	SWEDEN	4	3APRILZU18	ZOAPRILZUIO		FORESTRY	Book 1, Chapter8: Water	
							conservation (pp. 8:1-8:25)	57
SWEDEN	SPAIN	3	6FEB2017	5MAR2017		<u>ECVET</u>	Chapter 1.1 Work Safety	
BULGARIA	SPAIN	3	5FEB2017	6MAR2017		<b>ENVIRONMENT</b>	Chapter 1.2 The Work Environment	
						MANAGEMENT -	Chapter 1.4 Social Skills	
FINLAND	SPAIN	1	10SEP2017	80CT2017		GENERAL	Chapter 1.5 Verbal Communication	
						FORESTRY	in the Workplace	
BULGARIA	FINLAND	3	10SEPT2017	90CT2017		-		
SPAIN	FINLAND	3				<u>ECVET</u>		
SWEDEN	FINLAND	3	6NOV2017	15DEC2017		FORWARDER	???	
BULGARIA	FINLAND	2	CANCELED	CANCELED		<u>OPERATION</u>		
SLOVAKIA	FINLAND	2	02MAY2018	26MAY2018				
SWEDEN	GERMANY	2	220CT2017	11NOV2017		<u>ECVET –</u>		
BULGARIA	GERMANY	2	150CT2017	13NOV2017		ENVIRONMENT		
		2				MANAGEMENT –	???	
SPAIN	GERMANY					GENERAL		
						FORESTRY		

#### Table 5. Student Physical Mobility Schedule in the Tools for Skills – Teacher Training project



# 7.4 School Coordination for Blended Mobility

Schools may be sending and receiving students; these roles are not fixed and they may be reversed within the same or different projects. In other words, a school may be sending students to another school, whereas under some different circumstances, it may be receiving students.

Ideally, any exchange program should result in a net student mobility of zero, i.e each school and country should be sending and receiving equal numbers of individuals. This may not always be possible due to more advanced technology, such as forest harvesters and forwarders, and available resources in some schools and countries, but methods should be developed to balance student flow.

The following three checklists (APPENDIX 2, 3 & 4) are provided to facilitate school coordination and student exchange. The lists include but are not limited to a number of items, and may need to be customized on a per case basis.



# 8. THE ROLE OF TUTORS

### 8.1. Sending Country

When participating in the program as a sending country, the school will designate an Erasmus+ exchange programs coordinator to act as those students tutor

A series of tutorials functions will be established:

- a) Selection of students and proposal of destination assignment, ratified by the department workmates.
- b) Cooperation in the working plan development prepared by the tutor in the country of destination related to the center of destination scheduled activities.
- c) Pre-exchange work monitoring
- d) Exchange work monitoring, including: advice, assistance and mediation with destination center officials.
- e) Practices memory development, documentation and administrative justification (in collaboration with the destination tutor).

### 8.2. Receiving Country

When participating as a receiving country in foreign student exchange programs, the school will designate an Erasmus+ exchange programs coordinator to act as those students tutor.

- a) Student's guide development, containing addresses, phone number, schedules and circumstances that may arise to the students during their stay.
- b) Practice centers presentation
- c) Work done monitoring, including:
  - Welcome day
  - Students registration: confirmation of arrival
  - Guidance talk about different aspects related with the exchange (compulsory attendance)
  - Activities aimed to the integration of foreign students in their new context: guided tour around the education center to know its facilities and around the natural environment of the area, etc.



# 9. CONCLUSIONS

Mobility projects play an importart role for free flows of ideas and knowledge.

Students and or teachers can participate equally well in exchange projects.

For maximum efficiency, all stakeholders involved in student exchange programs must be well prepared in terms of resources for the actions to be taken and steps followed during the exchange.

Blended mobility combines virtual mobility, i.e. student preparation before traveling to the receiving country, and physical mobility, i.e. student arrival and attendance of classes at the destination, for maximum impact on learning, and it is regarded as a method to ensure maximum number of exchange students.

Exchange programs work best when the sending and receiving schools have previously signed bilateral agreements with detailed descriptions of all aspects of the exchange, such as commitment, budget, student selection criteria, field work, temporary placement opportunities and on-the-job training, field trips, duration, number of exchange students accepted, teaching methods and daily activity plans, appropriate educational material, tools, equipment, accommodation facilities, etc.

Different exchange program plans have been examined, according to sending/receiving school class availability. The consensus was that exchange programs should better be organized on a two-semester basis: one semester for virtual mobility, and another semester for physical mobility.

Various learning and teaching schools and approaches applicable to blended mobility are recommended as well as what-if worst case scenarios, where students and/or teaching methods do not perform as expected requiring remedial action, are discussed.



# 10. **REFERENCES**



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# APPENDIX 1 – OVERVIEW AND CRITICAL ASSESSMENT OF EXCHANGE PROGRAMS

Education in the EU must be accessible to all, according to Article 14 of the Chart of Fundamental Rights of the EU:

*Everyone has the right to education and to have access to vocational and continuing training.* 

Official Journal of the European Communities, 2000/C 364/01

The Chart of Fundamental Human Rights, in its Preamble, declared that the European Union:

"...respect(s) the diversity of the cultures and traditions of the peoples of Europe... seeks to promote balanced and sustainable development... and ensures the freedom of establishment".

### Some basic facts

Despite the optimistic outlook in 2017, poverty in the EU is not declining and one-fourth of the population live close or under social exclusion conditions (<u>http://www.euronews.com/2017/07/28/poverty-in-the-eu</u>).

The percentage of college dropouts in the EU and the world in general in increasing at alarming rates, and can reach 80% in some ethnic communities (e.g. native Americans). It has been estimated that if the United States could reduce the college dropout rate to half its present figure, it would save about 1 trillion USD over the next ten years

(<u>https://www.ted.com/talks/ken robinson how to escape education s death v</u> <u>alley#t-138014; 2:15</u>).

The continuous one-way flow of highly trained and specialized professionals, e.g. nurses, healthcare professionals, medical doctors, engineers, lawyers, etc. from Southern European countries to seek employment in Northern European ones is depriving the economies of the home countries of their most precious resources: their children and their investment in promising individuals.

Mobility for the sake of employment is a time bomb at the foundations of the European Union. It has been falsely promoted as a policy to enhance integration and improvement of living standards. Instead, it produces a melting pot of nomads, slashes civilizations, prevents the development of culture, uproots people from their homes and history, raises security issues with unfathomable consequences, and therefore must stop immediately.

Student/teacher exchange programs remain in high demand, especially from Southern European students, who feel that relocating to another EU country may solve the unemployment problems they face in their home country. This trend has just started subsiding within the last 1-2 year, as jobs have become more



difficult in the Western European countries, but no significant results are expected on the economies of the home countries before 10-15 years.

Job insecurity, another factor contributing the mobility between EU countries, reached epidemic proportions all over the EU after the 2008 economic crisis and is still looming over many countries, even the ones that were not affected by the crisis.

In many countries, student demand for traditional vocations, such as woodworking, has declined precipitously. Student preferences have shifted to other vocations which are considered easier or more money making, such as accounting, lawyers, business management, etc. and thus questioning the effectiveness of exchange programs.

Student exchange programs are a two-edge sword: they may give prospective exchange individuals a chance to obtain knowledge and improve their employability by visiting another country, but essentially stip countries of their most precious resource, their children. In the EU, there has been no estimate of the damage caused by exchange programs and luring human resources away from their native countries and the impact on local economies, where they are needed the most.

# Student Exchange Programs

Full semester or academic-year-long exchange programs can be very expensive; students from lower-income countries may not afford to attend school in countries with a higher cost of living. We are aware of many examples of students from Souther European countries, who attended one-semester exchange programs at Northern European countries and they had to pay out of their own pocket almost as much as, and in many cases twice as much, the Erasmus+ contributed funds, to cover the extremely high cost of living in these countries, while keeping a tightly managed budget avoiding EXCHANGE PROGRAMS excessive spending and other frivolous activities.

Economic considerations combined with education-for-all is probably the fundamental reason of blended mobility: Reduce the provided grants per student, so that twice as many students and/or trainers will be able to attend an exchange/training program. In principle, this is a good idea, but it has a downside too: how will the rest of the expenses be paid? There is official silence to this question, but the answer is clear: interested parties must self-finance the balance.

In fact, the cost factor of the Erasmus+ project is a serious impediment for mobility: there are numerous cases of students from South European countries that have expressed their desire to participate in an exchange program, but did not because they could not afford the expenses. As a compromise, many students of lower income families had to switch to less expensive destinations, such as Poland and other former Eastern bloc countries.

If student exchange is to be integrated into education, as it should, more funds need to be allocated centrally to this objective. On the other hand, all stakeholders (receiving and sending schools, National Authorities, charity foundations, etc.) must be more actively involved and contribute to help lowerincome students achieve their ambitions to visit and study in other countries.



Alarmingly, however, student and/or trainer exchange seems to be a one-way street from South to North Europe. Many students from South European countries seek exchange opportunities and eventually attend training in the North every year. This is not surprising given the fact that schools in the North offer more learning opportunities either by being better organized or by having more educational resources and wealth available. In the case of the Tools for Skills project, German, Swedish and Finnish vocational schools offer harvester and forwarder simulators, have their own forest harvesting and forwarding equipment, and abundant chainsaws for hands-on training. In addition, these schools have nicely organized machine shops for chainsaw cleaning, maintenance, chain sharpening, etc. together with nicely organized dorms, student restaurants, and other accommodation facilities. In contrast, no project partner from the Southern European countries could provide educational resources to match those of the Northern partners.

Northern European countries and developed economies were not hit by the 2008 global economic crisis as hard as Southern European countries with weaker economies; as a result, vocational schools of the North could hire needed human resources, such as English-as-a-foreign-language teachers, much faster than countries of the South.

### Case Study: Greece

Greece, along with other countries of the so-called South, had to go through almost a decade of austerity measures and restructuring of its economy. During those years, the Greek educational system suffered from curtailed funding. According to DW reporting, cited at the ICEF Monitor website (<u>http://monitor.icef.com/2014/10/continuing-economic-crisis-greece-pushespulls-student-mobility/</u>):

> "In 2011, the annual Ministry of Education budget for the University of Crete was 17.5 million euros. In 2012, the budget was cut by 75% and in the following years by a further 15%. Next year there will be yet another cut of 23%."

University professors have retired without being replaced; government employee numbers have been reduced by almost 80% (for every five government employees retiring, one new employee was hired). At the same time, the majority of public and private employees saw their income shrink by 40%; and those were the lucky ones to still have a job.

With youth unemployment still soaring at 45%, compared to the EU average of 17%, Greek young people are leaving the country by the boatloads. Combined with the acute demographic problem, the curtailed economy, the lack of private investments and the strict economic measures imposed on the country by its bailout programs, which essentially steal the wealth of the country, and the immigrant waves from the East, makes a very Dark future lying ahead.

Nevertheless, education is deeply rooted within the Greek system of values. In contrast to the definitions of Higher Education Institutions by the European



Commission (see p. 2), vocational training is not considered higher education by Greeks, and thus not a preferred option for education or employment.

The huge majority of the Greek families are prepared to invest every single penny of their savings to the education of their children.

9% of Greek students study abroad, compared to an average of 3.8% of other European students.

An informal survey showed that over 50% of 19-25 year old Greeks have left their home country and are currently employed elsewhere. And the mentality of the rest of the population is even worse than the above figures.

A recent study by a major Greek bank (<u>https://goo.gl/7EPbpi</u>) has reported some overwhelming statistics showing the great potential of the Greek educational system:

- Anywhere from 105,000-110,000 of international students could register to study in the Greek Universities, resulting in 50 billion EUR incoming over the next ten years
- 6 of 10 Greek University professors teach in foreign countries, compared to 1 of 10 European professors
- Greek student relocation for studying and total costs have grown exponentially as shown in the following Table.

	# GREEK		
	STUDENTS	YEARLY COST	
	STUDYING	OF STUDIES	TOTAL COST
YEAR	ABROAD	(€)	(BILLION €)
1975	800,000	20,000	16
1995	1,500,000	20,000	30
2015	4,500,000	20,000	90

The above Table is revealing: it shows that Greece has export huge amounts of money to other countries (mainly the EU) to educate its children.

And the question becomes: how much longer will the country have to tolerate the nonsense economics bailout plans imposed to demolish its national economy and salvage the Euro and the banking system of its greed?

This North-South divide and one-way flow of students and trainers from South to North does not promote EU integration acts as a time-bomb at the foundations of the European Union, and must change for three reasons:

a) it is commonly accepted that the countries of the European North have the highest educational standards, effective training systems, and are hotspots of innovation. Combined with the inherent curiosity and drive of youth for new experiences and acquaintances, these countries are the *de facto* pole of attraction for students from all EU countries,



- b) the attractive Northern European educational system, combined with the numerous and irresistible career opportunities, acts as a bait to lure invaluable young human capital away from their respective countries, where it is needed the most. This has resulted in about 500,000 highly skilled individuals leaving Greece since the 2008 economic crisis hit the country.
- c) it pushes people to an opportunistic and nomadic life not really allowing them to settle down permanently at one place and create culture. Exchange programs without the proper balancing measures wipe out individuality and lead to a melting pot from where no culture can escape.

# Conclusion

The state of affairs described above does not guarantee diversity of cultures and traditions, balanced development, free flow of knowledge and ideas and freedom of establishment for all. It creates lopsided development and allows some countries to fuel their economies by importing labor and vigorous young minds, and to sustain their social security systems with the young blood to pay for the retirement benefits of their aging population. It is catastrophic, however, for the less affluent, lower income countries, as it leads to brain drain, sharp decline of their struggling populations, and leaves the door wide open to new immigrant waves, with the civil unrest, political turmoil and social instability experienced in almost all EU countries in the years after the 2008 economic crisis.

It is about time that some decision-makers get rid of their blindfolds and double standards, and start thinking seriously about the good of the EU as a whole rather than a bunch of local economies acting together to make money for the few. In this effort, they should also examine the harms and benefits of exchange programs through the eyes of those that sustain the greater loss: the poor countries.



# **APPENDIX 2 – RECEIVING SCHOOL RESOURCE AVAILABILITY CHECKLIST**

### What The Receiving School Must Have To Receive **Students**

	Commitment to student exchange (willingness and capability)			
	Budget			
	Bilateral agreement(s) signed with other similar school(s)			
	Curricula alignment between schools (see <u>SCENARIO 2 – ALIGNED SCHOOL</u> <u>CURRICULA</u> , above)			
	Student accommodation and subsistence infrastructure (dorms, restaurants, laundry facilities, etc.)			
	Teaching human resources (e.g. sufficient number and specialization of teachers, properly trained technical support personnel; etc.)			
	Educational material (e.g. language of lectures, textbooks and manuals, in- class assessment tools, tests and exams, grading rubrics, etc.) shared with other schools			
	Mechanism for transfer of credit			
	Transportation means and resources (vans, cars, drivers, equipment hauling trailers, etc.)			
	Tools, instruments & equipment (e.g. chainsaws, harvesters, forwarders, simulators, etc.)			
	Classrooms, libraries, study rooms, machine rooms, workshops, labs, tool cleaning/maintenance facilities, etc.			
	IT infrastructure (computer rooms, communication platforms, information exchange/internet access, etc.)			
	Student insurance			
	Student/worker safety in class and in the field			
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Arrangements/agreements with employers for internships

etc.



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# Information/Guidelines To Prospective Exchange Students

Location of school			
School history and Campus description			
Business hours			
Student conduct code			
Contact information (security emergency phone number, local Fire Department phone number, helpdesk service, fellow student guides, learning coaches, janitorial assistance, etc.)			
Surroundings and accessibility (public media transportation and timetables, nearest train station, airport, convenience stores, etc.)			
Travel Instructions (travel dates, how to arrive to school, etc.)			
Number of openings			
Exchange intervals (from – to)			
Prerequisites (e.g. general training, international driver license, etc.)			
Accommodation (room and furniture description, photos, occupancy (single or double rooms, individual or shared bathrooms), etc.)			
Facilities (laundry rooms, study rooms, libraries, workshops, etc.)			
Meal schedule and restaurant hours (breakfast, lunch, dinner, lunch bags, weekend schedule, etc.)			
Registration procedure and required documents			
List of tools and equipment provided by school (e.g. chainsaws, personal protective equipment, clothes, etc.)			
Equipment time-sharing plan			



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Daily and weekly tool maintenance schedule			
Proof of linguistic aptitude (grades in TfS vocabulary tests taken at home, certificate of B1/B2 English level, simple basic English test results)			
Proof of tool handling adequacy (e.g. copy of recent chainsaw certificate, heavy machinery driver license, other professional certificates, etc.)			
Equal Opportunity policy			
Proof of student insurance and any additional coverage needed (certificate from insurance company of home country about coverage in the receiving country)			
Known student disabilities, allergies or health problems requiring special attention (student signed questionnaire)			
Emergency health care services (nearest doctors, pharmacy, hospital, ambulance service, emergency, etc.)			
Budget breakdown (travel expenses, total and daily subsistence costs, tuition fees including workshop/lab fees, methods of payment, etc.)			
Local cost of living (estimate)			
Special permits, documents or other local requirements for work/study			
Trainer names, contact information, expertise, educational material and responsibility breakdown			
Daily schedule of classes (start/end, location, teachers, etc.)			
Syllabus (Classroom and field work description, number of credits, etc.)			
Student Assessment and Grading Rubrics, Method of teaching (number of teachers, simultaneous English/local language teaching, eliminating cultural bias in the tests, etc.)			
Special clothes students should have with them			
Personal Protective Equipment offered and required from students			



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# APPENDIX 3 – EXCHANGE STUDENT REQUIREMENT CHECKLIST

### What Students Applying for Physical Mobility Should Have or Send to the Receiving School

Commitment (eliminate all last minute excuses like "I don't have where to leave my dog")		
Personal Statement (250-300 words) stating the reasons for transferring and how to achieve goals		
Academic record (transcripts, etc. in English)		
Proof of basic English adequacy (B1/B2 level Certificate)		
Proof of terminology proficiency (results of a recent test taken)		
Certificate of tool handling (chainsaw, driver license, etc.)		
Special skills and talents (heavy machinery driving skills, portfolio?)		
Insurance arrangements (copy of policy, etc.)		
Any health problems that might affect the exchange (allergies, disabilities, etc.)		
Special clothes and gear for local conditions (e.g. waders, boots, snow- blindness or sun glasses, sun burn cream, gloves, thermal underwear, etc.)		
Personal Protective Equipment (check what the receiving school may have available)		
Learning Plan and METACOGNITIVE STRATEGY (how will I attain my goals and what will I do in case of failure)		



# **APPENDIX 4 – SELECTION CRITERIA**

Clear purpose of visit - assessed by Personal Statement
Basic English aptitude - B1/B2 Certificate, short test and Personal Statement
Technical terminology for respective Learning Objectives - tests
Academic record and performance - assessed by transcripts (courses taken, grades, etc.)
Other requirements (e.g. Chainsaw certificate, etc.)
Teacher recommendation/reference letter
Paperwork complete
etc.

Any exchange program presents various challenges for all stakeholders, such as finding schools with similar still differentiated curricula with the home school, bilateral agreement signed between the sending and receiving schools to participate in a student exchange program, ensuring that the school(s) have adequate resources and commitment.

A successful exchange program requires that all of these issues have been resolved in a satisfactory way before any students transfer from the sending to the receiving school.

Full semester student exchange courses represent the easy side of the problem, as many of the above challenges have been resolved, and neither the school nor the students have to take any extra steps to make sure they are prepared for the exchange. For example, students relocate to the receiving school, attend the coursework including homework and other assignments, take the exams like the local students, and their credits are transferred to their home country school.

The caveat in this case is cultural bias: the coursework and exams are unintentionally geared towards the local students without paying much attention to visiting students. For example, in the case of the "Tools for Skills" project, the answer to the question "Which is the emergency number to dial" would naturally be "112" by most European students, but Greek students would fail the above question because the emergency number in Greece is "100". In fact, public surveys have found that only 7% of the people in Greece know that they should dial "112" in emergencies (http://www.tanea.gr/news/greece/article/4589316/?iid=2) and despite the far



superior and diversified service offered by the European emergency number. Cultural bias and student educational background have been repeatedly invoked to criticize academic exams in the United States and other countries receiving many foreign students. Therefore, visiting student performance must be taken with a grain of salt, and the content of any course should be under constant scrutiny to discover cultural bias.

The above challenges, however, are intensified in the case of blended mobility, i.e. students actually transferring to another school for a limited time (usually 4-6 weeks). To begin with, traveling to a school in another country without a clear and specific learning objective is a waste of time and money. Thus, the first step students should take before even considering to participate in a student exchange program is to set the specific purpose of their visit. For example, forestry vocational training students apply for a student exchange program in another country because they want to use the harvester and/or forwarder simulators in that school lacking in their home country school.



# APPENDIX 5 – SAMPLE OF SCHEDULED DAILY ACTIVITIES



# Preliminary program for Bulgarian and German students in mobility action at Stora Segerstad Naturbrukscentrum

Teachers	Participants	Cell phone
Håkan Hulebo, HH	Mr. Aleksandar Momchilov	00359879 699665
	Georgiev	
Per Oscarsson, PO	Miss Zhenya Yordanova	00359878 283959
	Zhelyazkova-Zyumbuleva	
Bernt Andersson, BA	Mr Valentinov Valchev	00359894243881
Torbjorn Andersson, TA	Mr. Goy Gerdes	
Anna-Carin Jönsson, ACJ	Mr. Til Gericke	
	Mr. Julian Robers	
	Mr. Felix Eisenmann	

- 21/5 Arrival to Gothenburg Airport.
  - Pick up Bulgarian students by Anders Carlsson (tel +46 703807035)
  - Arrival of German students by car to Segerstad call warden upon arrival (tel +46 70 556 75 51)

DATE	TIME	TEACHER	SUBJECT
22/5	8:30-12:00	НН	introduction to the school and the program
	13:00-16:00	BA	Tools for skills –Language lesson
23/5	8:00-16:00	PO	Swedish forestry: regeneration and planting
24/5	8:00-16:00	PO	Swedish forestry ; cleaning and brushcutting
25/5	8:00-16:00	BA	Holiday Visit to Visingsö oak forests
26/5	8:00-16:00	BA	Åkulla Beech forests
29/5	8:00-16:00	PO	simulators and cranes
30/5	8:00-16:00	PO	Forest machine maintenance
31/5	8:00-16:00	PO	Husqvarna factory
1/6	8:00-16:00	PO	wild game management
2/6	8:00-11:30	ACJ	Language lesson together with Swedish
			students
5/6	8:00-16:00	PO	natural forest visit Marieholm



DATE	TIME	TEACHER	SUBJECT
6/6	8:00-16:00	BA	nationaldag apladalen
7/6	8:00-16:00	TA	Visit to Elmia Wood
8/6	8:00-16:00	TA	Visit to Store Mosse national park
9/6	8:00-16:00	TA	Visit to Elmia Wood
10/6	8:00-16:00		Visit to Elmia wood (optional)
12/6	8:00-16:00	TA	Swedish forestry: pine forest management
13/6	8:00-16:00	TA	Swedish forestry: chain saw operations
		PJ	Harvester and forwarder operation
14/6	8:00-16:00	PJ	Harvester and forwarder operation
		TA	Swedish forestry: chain saw operations
15/6	8:00-16:00	BA	Saw mill, machine manufacturer
16/6	8:00-16:00	BA	Tools for skills
19/6	Departure (German students might leave earlier)		



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