



Just in Time reBlending

Final Report

Product No 10

TEACHERS/TUTORS TRAINING

Teaching and tutoring in the Mobile Supported Learning
Environment – new methods

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Product No. 11 – Teachers/Trainers guide/manual (including learners' guides)

1. Tutor's Guide
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INTRODUCTION

The goal of this document is to give some recommendations how to train teachers and tutors to use the platform and Learning Objects (LOs) in the Mobile Learning Environment (MOLE). Recommendations are based on the experiences of the reBlending projects' piloting group – how they implemented the teachers/tutors training. What kind of problems they encountered and how they survived, but also what should have been done differently?

With the help of this document and training, teachers/tutors are able to start teaching in the authentic environment. This document includes appendixes, which are Teacher's/tutor's Guide/manual and Learner's Guide/manual. The Guides have been translated into five languages English, Finnish, German, French and Swedish.

Mobile learning differs a lot from the normal classroom learning. New methods and tools requires a lot of new know-how from teachers/tutors. That is why the training teachers/tutors is a very important phase. The Teachers/tutors role is to function as a technical support alongside with normal work – teaching. Of course, there should be some kind of help desk available for teachers/tutors when technical problems encounter.

1. TRAINING SESSIONS

Training for the Mobile Supported Learning Environment (MOLE) is a necessary phase. Teachers/tutors changed role demands know-how of technical systems and functionalities concerning the MOLE. In the future the ideal base for teacher/tutor would be that the teacher/tutor makes him/herself familiar with the help of the Guide with technical functionalities of the platform and Learning Objects (Los). At this stage is MOLE is a prototype and further technical development of the prototype means also that training the trainers has to be part of the development. The use of the devices, platform and Learning Objects (LOs) require instructions.

On the Multiplatform Learning Environment (MOLE) students can access the learning environment and resources by various devices like by mobile phones, iPods, PDAs (Personal Digital Assistant), smart phones, communicators as well as computers. In addition to this pedagogical support and automatic tutoring can be provided to students' working and learning in the learning-on-the-job setting. The students' concrete work tasks are facilitated and guided by mobile learning tools.

During the project the teachers and tutors training was mainly organized via Internet. The Internet and different kinds of videoconference applications (like Acrobat Adobe Connect Pro and Skype) were excellent tools to keep contact to all the piloting partners in France, Estonia, Sweden and Finland.

During the transnational face-to-face meetings, there was not enough time for training the trainers in the project, as the meetings had to cover a number of other issues to be decided together. During the meetings the piloting group was able to mainly test the functionality of the platform and the LOs with mobile phones. These training sessions focused on technical testing and questions related to technical solutions and functions. It would have been highly recommended that the piloting group should have had more face-to-face meetings. In this project physical distances between pilots were problematic – the group consisting of Finnish, French, Swedish and Estonian members. Another challenge was that partners have not used mobiles in teaching and learning earlier and the whole concept was new.

The training sessions were organized mainly via e-mails and virtual meetings. The Connect Pro application (hosted by Partner 3, HAMK) was used for realizing the virtual meetings. Adobe Acrobat Connect Professional (Connect Pro) communication system for synchronous interaction offers the possibility to share and write together documents and use video picture and sound. The piloting group used the Connect Pro application quite regularly – approximately 12 times during training period. The Connect Pro application proved to be practical and very helpful solution. It replaced very well the face-to-face meetings. A good help in this kind of meetings is that the members are quite familiar with each others – members already know how individuals work. Nevertheless there were some problems: in the beginning with the technique, and later finding for everybody suitable meeting times. It has to be stressed, that this kind of meetings requires the attendance of the technical members, as most of the problems and questions were related to the technical solutions. The piloting group was very motivated to learn how to use the platform and the LOs, so they were solving problems together as well as learning from others questions and way of thinking. This piece of experience shows how important is the role a community of learning in projects like this.

The training must be carefully planned, including a good estimation of the technical know-how of trainees and the minimum amount of training sessions. The first step is to let the trainees get themselves familiar with the platform and the LOs. The next proceeding is to have a self-access period – so that everybody really have tested, how the MOLE works. After these experiences the students are ready to start to learn. The self-access periods should happen on-line. So everybody have possibility to get help just-in-time.

2.1. DEVICES AND ACCESSORIES

Mobile learning in this project means that the learner is mobile and need teachers/tutors support in an authentic working situation. It means that the learner,

being mobile is studying in different situations ; working in the office, participating at or visiting a fair, waiting at the airport, sitting in a taxi, preparing him/herself for a meeting in a hotel room etc. In these situations the learner has a possibility to access the learning platform via different mobile devices. Though the learner is mobile, nevertheless the devices play an important role in the process of learning. Therefore the trainers need good knowledge about the current development level of the mobile devices and the suitability for the use for this type of learning. There are some requirements to devices and accessories. For the use of MOLE and LOs there are now (October 2007) certain suitable models, but the number is constantly increasing. The partners have drafted a list of devices that are suitable for the platform.

Mobile devices, using the Symbian operating system, S40 and S60 user interface, were selected as target devices. The implementation of the applications of the platform in this project has been conducted in accordance with the newest versions of devices. Phones by Nokia and Sony-Ericson have been used as test equipment.

Requirements:

- Mobile devices with Java support
- Enough memory on the mobile device or external memory card
- Nokia models: S60 series, S40 series, 5300, 6131 and 6300
- Sony-Ericsson models: W660i, K750i, W580i, P800 and P900
- Accessories: headphones (to listen audio files), mobile phone USB cable (if using computer to download the Learning Objects)

With the above-mentioned equipment having corresponding the requirements the technical implementators and pilots have tested the Just in Time reBlending prototype. The lessons learned are that all technical systems have to be tested. Yet they do not always work as wanted, despite testing. The biggest reason for this is the personal installations and rights in the mobile devices. E.g. the interference of admin rights and the rights to edit one's profile are restrictive factors. A problem can also form different subscriber connections. E.g. all the piloting group's members didn't have the rights to use Internet via mobile phone. Those pilots had to use the computer version.

The learning material is mainly designed to be accessible via a mobile phone, though some assignments are designed to be used with computer only.

It is worthwhile to stress that it is utterly important, the trainer is well familiar with his/hers own mobile devices and test the devices using the manufacturers own guides and manuals.. The user interfaces in most current models have more or less the same logic, but because of some differences, e.g. in the file storing system, it is valuable to be aware of the functionalities of the used model.

1.2.PLATFORM

The architecture of the platform was designed in the beginning of the project. When the technical implementation of the platform was ready, it was presented to partners. The Partners – teachers, tutors and pilots – gave feed back, opinions and correction proposals to the technical partners. In some cases the suggestions were not possible to realise, accordingly the team had to leave out some wishes. It was necessary to reflect upon the main goal of the platform, namely to design and construct the platform to work with mobile phones. This procedure was repeated as many times as the platform could be accepted by all testing members and ready for use.

The training of the platform happened mostly through the testing and commenting process, which was at the same time an excellent learning process for the piloting members of the project. When the platform was ready for use, the piloting members were already fully trained for the efficient use of the platform, accordingly trained, so that the piloting group did not need a separate training course. The lessons learned are that the more the trainer works with the platform, the better he/she is prepared for the training of learners.

After the check of the device requirements it's recommended to test the platform, its navigation bar and its functions. The Tutor's and Learner's Guides are useful tools for

the use of the platform, the navigation and functions in detail (see Product 11 Teachers, Learners´Guide/Manual).

2.3. LO's

In this context, we define a Learning Object (LO) to be small piece of learning material that is a reusable, compact, as well as a unitary entity. The LOs can be described as the atoms that can be linked together with each other forming a learning process (Silander and Koli, 2003) (vs. molecule like hydrocarbon chains). The LO can be defined to be the smallest pedagogically meaningful entity of learning material.

This part, creating, testing and training how to use the Learning Objects, was the biggest and hardest and most challenging part of the training. As above, in the platform training, also in the LOs' training, the technical implementation, testing, correction and training process occurred at the same time. This was only natural, as the pilots/tutors were mostly the same as the LOs' content creators, authors.

The technical problems proved to be the most challenging part in the LOs' training. The biggest problems occurred especially when pilots tried to save the emulator to their computers. Emulator is an application that is needed when doing some assignments (that are using the *.jar. and *.jad. files).

During the Just in Time reBlending project many types of LOs were developed. Most of the LOs are audio clips or Internet pages, but also gap filling assignments and text assignments. The LOs can be downloaded from the www-page direct to the mobile

phone or to the computer. After the saving to the computer the LOs can be moved over to the mobile phone.

2. SUMMARY

A well planned training is required before a teacher/tutor can start the course. The achievement of the project work, the platform, is a prototype, needing further development. Especially the technical systems might prove problematic. Technical problems can be removed with further development, at the same time the training will be easier, maybe not required at all.

For most of the teachers/tutors this kind of teaching method is new –the used devices and the way to use them in training are not yet familiar to most language teachers. The future users, target groups, are still users, who probably only know how to call or send a text message with a mobile phone. Many of the trainees did navigate for the first time with mobile phone in the Internet or saved for the first time files from Internet to the mobile phone. It's important to remember to keep the instructions of the technical systems as practical and simple as possible, and thus give the trainees the possibility to understand and learn to use the devices without fear.

Teachers/tutors need to be able to have time to familiarize themselves for the tutoring via the MOLE, the platform. Before training the use of platform and LOs it's important to study and check the devices and requirements in the training sessions. During the training period it would be helpful to have some kind of help desk available. Enough face-to-face or virtual training meetings are most recommended, so that the trainers themselves are trained user and able to help and support the learners through problematic situations – making the learning experiences motivating and rewarding. .