

D18: Training documentation & evaluation – Report on teacher’s training implementation within WP10

- 1) Conclusions and recommendations of the trainees with regard to: a) improvement of future training of eSchool4S teachers/tutors b) Further improvement of the eschool4S web-based classrooms (design, structures, processes, contents, materials)

Teacher training process

Two of the important goals of the eSchool4S project are to design a concept for a web-based classroom and create e-teaching materials for the said classroom. After finishing work package 6, the design of web-based classrooms using Moodle platform, and work package 8, the production of e-teaching materials for the web-based classroom, the eSchool4S project entered a stage at which training of the participating teachers was to be implemented.

The eSchool4S project envisioned the teachers from secondary schools, which showed interest and were motivated, to receive training on the use of the platform and the materials uploaded. The training process was to be implemented in three stages and every stage was to be accompanied by an evaluation questionnaire. The purpose of the questionnaires is to provide the project partners with the feedback of teachers and to show whether the project products (the Moodle platform and the e-teaching materials) are on the right track and consistent with needs of teachers. Only the teachers who completed all three questionnaires, and presumably participated in all stages of the training process, were to be eligible to receive a certificate after the completed training and become assistant teacher/tutor.

The training was implemented in three steps:

1st step:

In preparation for the first step, an invitation for the teachers was created and distributed to project partners. A special area named “Teachers’ corner” was opened within Moodle platform and there the questionnaire was uploaded. All materials regarding teachers were to be uploaded into Teachers’ corner: written manual on how to use Moodle, instructions on copyright and a forum for teachers to exchange ideas and examples of good practice, along with webinar recordings and any other material which will be of interest to teachers only. A short and concise user manual (how to register at the Moodle platform and how to access lessons) was created and distributed to the partners, who in turn distributed it to the interested teachers. This user manual included the enrolment keys for the course “What is sustainability?” and the Teachers’ corner.

In the first step the teachers filled out the first questionnaire designed to gain more information on their educational background, level of information on eSchool4S network and motivation behind joining the eSchool4S network.

2nd step:

To introduce teachers to the platform and enable them to use the materials prepared for them, two webinars were organized.

The first webinar was held on October 1st 2015, at 18:00 CET, using Adobe Connect and the number of participating teachers fluctuated between 18 and 20. Teachers could participate in the webinar and ask questions. The aim of the webinar was to introduce the teachers to the platform, covering topics from how to register and log in into Moodle, the structure of the platform (courses – lessons), how to use the platform, what is expected of teachers and what are the expected outcomes, the didactic concept of the platform, what is the teachers' corner and what type of materials can be found there and a brief introduction into copyright. As the teaching experience and background differs within the project countries, the didactic concept based on 3 interdisciplinary competency domains (recognition, evaluation, action) was elaborated to help teachers understand the Moodle materials better. An example course "What is sustainability?" was presented, along with enrolment key for the course. The same enrolment key was to be used for other courses. The teachers were asked to join the forum and an assignment was given to the teachers to facilitate the implementation of the courses in the classroom. The teachers were asked to write a lesson outline for the second webinar in which they were to sketch out their use of the example course "What is sustainability?" without an elaborated lesson preparation. The teachers were invited to use the platform and the materials, include them into their classes and to participate in forum and the second webinar. They were also asked to complete the second questionnaire, which was made available in the Teachers' corner. The goal of the questionnaire was to give insight into the teacher's experience of the training and to give teachers opportunity to suggest modifications and optimizations of the platform.

The presentation used in the webinar was uploaded into Teachers' corner, and a link to the webinar recording was made available as well.

3rd step:

The second webinar was held on October 15th, at 18:00 CET, again using Adobe Connect, with 20 teachers participating live. The aim of the webinar was to showcase some of the lesson outlines, to get feedback from the teachers on the implementation of the materials and to exchange experiences live. During the webinar some teachers shared their experiences and issues they face when teaching. The Moodle structure was revisited, as well as the didactic concept of the eSchool4S platform and an analysis of the lesson outlines was given (of the 34 lesson outlined uploaded into Moodle by the time of the second webinar). Questions on teachers practice were asked to start the discussion.

The analysis of the uploaded lesson plans has shown that majority of teachers chose to upload lesson plans for the topics and lessons they carry out on a regular basis, without inclusion of the "What is sustainability?" course. This may mean that the instructions were not clear enough for participating teachers. Recommendation is to offer teachers written breakdown of the assignment, to be referenced when needed.

The teachers were asked to complete the third questionnaire in order to evaluate the training progress, give conclusions and recommendations for optimization.

The training proved to be implemented successfully, with active participations of teachers from all of the partners' countries. The majority of participating teachers came from Romania, showing that Romanian partner was the most successful in including teachers into the project.

To ensure transparency of the certificate awarding process, the complete list of eligible teachers was uploaded into Moodle platform.

It is very important to note that Romanian partner reported one teacher was not included in the list of teachers eligible to receive the certificate. As the partner insisted this particular teacher completed all steps necessary and Aquilonis as the workpackage leader accepted the possibility of malfunction of the Moodle platform, a certificate was issued to a particular teacher.

Evaluation of the questionnaires

The evaluation of the questionnaires was carried out by the Pädagogische Hochschule Tirol as this particular partner is in charge of the evaluation process in the eSchool4S project.

Teachers following the online courses were asked to complete questionnaires at three different stages to ascertain success levels.

The sequence of the questionnaires is as follows:

- I. Teacher background
- II. Teacher training
- III. Teacher follow-up

The first questionnaire was set up in the following way:

- 23 Questions
- Question formats
 - o to be rated on scales of 4 - 5
 - o comments to be added
- Themes
 - o technical
 - o thematic
 - o linguistic

There were 65 respondents from Bulgaria, Croatia, Germany, Hungary, Romania, Serbia, Slovakia.

The first seven questions were focused on organizational issues, ascertaining information, for instance, on gender, age and school-background. The average age of participants was 44. This might lead on to further questions as to whether this is the average age of those particularly engaged in ESD issues or rather those looking for instruction in learning platforms. The majority of participants were from Upper Secondary Schools.

The next block of questions focused on Sustainability, Topics and Methods.

The rate of familiarity with Sustainability 3.4 out of 5, thus an average score during the initial phases of the training. Also at this stage, there is a broad range of mentions of Sustainability in lessons from 24% “never” to 37% “several times a year” 37% or 3% “every day”.

Question 11 was concerned with the choice of ESD topics dealt with in lessons and here we find the full range of topics demonstrating varied emphasis.

Question 12 was concerned with teaching methods. Methods such as observation, problem solving, peer learning were mentioned. Materials & media were also mentioned raising the question as to whether the differentiation is important for this purpose.

Question 13 asked about the number of thematic training sessions on ESD already attended. For 38 of 65 participants this was the first session bringing the average down to 1.

Question 14 focussed on topics participants would like to learn more about. Here again we find the full range ESD topics demonstrating different levels of knowledge & interest.

The final areas were around eLearning Platforms (Questions 17 – 23) and copyright issues (Questions 24 – 26).

The second questionnaire was set up as follows:

- 19 Questions
- Question formats
 - o to be rated on a scale of 4
 - o comments to be added
- Themes
 - o technical
 - o thematic
 - o linguistic

There were 46 respondents from Bulgaria, Croatia, Hungary, Romania, Serbia and Slovakia.

Questions 2 - 5 were concerned with technical issues, specifically focusing on login issues. Question 2 provided a clear and useful conclusion on general satisfaction concerning registration, i.e. a satisfaction level of 3.5 and above on the 4.0 scale. Thus, the question can be considered useful for future initiatives.

In retrospect questions 3 & 4 were not clear as to whether targeting competence of users or functionality.

No concrete suggestions were voiced as a response to question 5.

Question 6 ascertained that only 30% of respondents attended the Webinar live. As the responses to question 7 do not correlate to the percentages, it would appear that "Not applicable" was not clear. This should be considered for future formats.

There were no suggestions put forward to further facilitate access.

The responses to question 10 can be seen as extremely positive in that 91% considered the pacing to be just right.

Questions 11 & 12 focused on linguistic issues. It was thus ascertained that 70% experienced success at reception level. 54% claimed to have come across unknown words. For future formats the sense of the question should be considered in that unknown words do not always pose a problem.

The next two questions aimed to discover to what extent the course was considered useful. This is a pivotal issue and with 43% very useful and 52% somewhat useful the results can be seen as highly successful. All participants felt competent to use at least some of the features with 52% competent to use major features autonomously and 17% competent to use all features.

The satisfaction rate with Moodle is high at with 3.2 on the 4.0 scale as the lowest score. It is, however, not clear in retrospect whether participants had this Moodle course in particular in mind or Moodle in general.

Question 16 was concerned with expectations. Again, the phrasing of the question could be considered again in future as it is not clear whether expectations were fulfilled or disappointed.

Question 17 is an important question as concerned with future perspectives. Although several responses were still Moodle-orientated, there were some interesting comments on Sustainability issues, such as, I want to learn:

- everything, but especially about solar energy, and its usefulness in machines, smart houses, etc.
- knowledge, values and skills for self-reflection and active citizenship

The format of the final questionnaire was as follows:

- 17 Questions
- Question formats
 - o to be rated on scales of 4 - 5
 - o comments to be added
- Themes
 - o technical

There were 48 respondents from Bulgaria, Croatia, Hungary, Romania, Serbia and Slovakia.

Of particular interest is Question 7 as concerned with classroom implementation.

19% of respondents claim that they use Moodle more often in the classroom after the first courses and 67% intend to do so. In this case, it would be of interest to know more about school facilities. Clearly, if teachers work in schools where learning platforms have become standardized practice, implementation is straightforward. On the other hand, there is an enormous challenge for those working without such backup.

Question 11 identifies lack of confidence in using Moodle as a teachers' learning need, whereby, again, the working situation is not clarified.

Finally, copyright issues are mentioned once more. The fact that there is general satisfaction about knowledge is a good indicator, whereby varying national rulings must be taken into account.

Conclusions and recommendations

We can say that the main training objective – for teachers to become independent in their use of the platform (materials and Teachers' corner) – was achieved. The number of questionnaires completed exceeded expectations, as well as the number of uploaded lesson outlines (39 in total, vs. expected 20). The number of participants in webinars also exceeded expectations and the recordings of the first webinar has been viewed 162 times and of the second webinar 45 times.

Based on teacher's feedback, the Moodle platform was the right choice for the web-based classroom, as it is easy to understand and use. For example, satisfaction level of 3,5 and above on the 4,0 scale was reported concerning registration and satisfaction rate with Moodle was 3,2 (on the 4,0 scale). Some teachers have reported difficulties with the English language, not in the training process, but in the use of the materials at their disposal. This feedback was mostly informal, but it is very important to take it into consideration.

The structure of the platform was easy to understand and follow and no difficulties were reported. 43% of participants found the example course very useful and 52% somewhat useful, which is a very successful result.

The teachers found activities for the classroom useful, presumably to increase student's motivation and it can be recommended to include more activities into all courses.

The platform can be recommended to teachers as it does not require any special technical skills and the process of registration and the first steps can be facilitated by simple and straightforward user manual. All participants felt competent to use at least some of the features. Equally important is the impact of the teacher training: 19% of respondents claimed that they use Moodle more often in the classroom and 67% reported to intend to do so in the future. Concerning this point, a very interesting question regarding school equipment and facilities can be raised: if teachers work in schools where learning platforms have become standardized practice, implementation is straightforward, but if not, there is an enormous challenge for those working in different conditions.

The structure is easy to follow and understand and providing participants with a visual layout of the structure is helpful in understanding for teachers coming from countries which do not follow or implement evaluation/recognition/action didactic concept.

It is very important to note that the webinars have been very useful and well adjusted for the participants: 91% of the participants found the pacing to be just right, and even though 54% reported to come across unknown words, it did not seem pose a problem for understanding.

Webinar proved to be useful in both elaboration of the platform and training in how to use it, but to gain live feedback from teachers. It should be accompanied by clear communication of assignments for participants, for example, to include an assignment breakdown into the presentation used during webinar.

Some questions included into the questionnaires should be reconsidered and rephrased to ensure more useful information in the future steps and evaluations. A good example is question number 16 in questionnaire 2 "What did you expect to learn in the Webinar?" as it does not yield any information on whether the expectations were met.

Informal feedback from the participants revealed some difficulties with English language and it may pose an issue in the future steps of the project. At the same time, the future steps will prove to be extremely important, giving us the opportunity to perform corrective measures and adapt the platform to the needs of the teachers and students.



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