



## FAMT&L

# FORMATIVE ASSESSMENT IN MATHEMATICS FOR TEACHING AND LEARNING

# Work Package 6 - Assessment of pilot training courses and Quality Assurance

# Deliverable D6.2– Evaluation reports & peer reviews (Report)

Start date of project: 01/12/2013

Duration: 36 months

Lead organisation for this deliverable: InHolland

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Deliverable number	D6.2		
Title	Evaluation reports & p	eer reviews	
Type of outputs / products / results	Report		
Delivery date	M5, 15, 22 (input on project proceedings) (Feb 2014, Dec 2014, Jul 2015) M18, 36 (input interim and end reports to EACEA) (Mar 2015, Oct 2016)	Dissemination level	<ul> <li>X restricted</li> <li>Restricted to other programme participants (including Commission services and project reviewers)</li> <li>Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)</li> </ul>
Nature Language	X Report Service / Product Demonstrator / Pro Event Other	ototype	
versions			
Target languages	English		

**Description** (limit 1000 characters)

InHolland will present in each partner meeting the progress made during the lifetime of the project towards a sustainable impact. The subcontracted auditor/evaluator will provide external and independent advice on the project's progress.

Where the QA Plan is used to evaluate overall project and individual WP activities, the evaluation reports (month 12, 24 and 36) serve as a communication tool among partners, WPs and associated partners/networks. Peer reviews will be performed and bring added value to the internal and external quality management.

Extensive peer reviews conducted by the coordinating partner using the project's networks and learning community, combined with feedback from targeted beneficiaries, will allow the project management to use comments & criticisms to improve the final quality and relevance of the project's outputs.

#### Deliverable fact sheet

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#### Executive summary

This document reports the evaluation process during the project. It is a reflection on project meetings, progress and measures taken to assure quality. It describes the objectives of the project evaluation and tools and processes used. A description of the meetings is used as a framework to show how the progress was monitored, what strengths and weaknesses were encountered and how they were dealt with. The work packages are discussed.

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## 1. The FAMT&L Project

#### 1.1 Background

The international team of researchers *Formative Assessment in Mathematics for Teaching and Learning's* main objective is to design a virtual environment (a web repository) for in-service teachers' training in formative assessment. This learning environment should provide a variety of tools and objects (examples of learning contexts, video of situations of teaching mathematics, assessment tools, training paths and their specific use in the teaching of mathematics), including a guideline to be used in in-service secondary schools teachers training courses.

To achieve objectives the FAMT&L constructed an innovative path to ensure the quality of the training and content of the web repository. This path started with a review of existing literature from which our starting point was defined, consisting of a work definition of formative assessment and a structure to build on. In the second phase a questionnaire was developed for students and teachers. The analyses of the results from these questionnaires were used to form a grid with indicators used for development of the training. These results also form the building blocks for analysing and metadation of videos of good practices for the training course. Phase three of the constructed path is the creation of the web repository. The final phase will consist in training teachers.



## 2 Introduction/Objectives:

#### 2.1 Quality Assurance and Evaluation Plan

Within FAMT&L, the Quality Management of the project is conducted under Work Package 6. The Integral Quality Assurance & Evaluation Plan consists of procedures, criteria and resources for monitoring and internal and/or external evaluation - including quality control and testing. It also covers monitoring of interim and final results with regard to the needs of the target group(s) and sector(s) and of the potential end-users.

In particular, the objectives of the plan, in conjunction with all stakeholders;

- Manage guide partners in quality management;
- Organise peer reviews;
- Produce Quality Report;
- Record the progress of the project's proceedings;
- Assess fulfilment of schedules, tasks and targets;
- Identify problems in the operation of the partnership.

The project is also managed by maintaining the Project Deliverable Calendar to ensure the project remains on schedule.

#### 2.2 Formative objectives.

The formative objective is by using the PDCA-circle (Demming) to monitor the program implementation and results, as a support to continuous improve the products and process.

It gives tangible and objective measures of the performance and uses a set of indicators. They define the target level, which will correspond to the objective of the programme.

- *Resource indicators* refers to the budget allocated, *financial* are used to monitor annual progress of commitments and payments (e.g. Interim financial report)
- Output indicators refers to the activities (e.g. preparation of National statements)
- Result indicators (e.g. evaluation of a meeting)
- *Impact indicators* refer to the consequences of the programme. We will consider the impact occurring soon after the pilot course and after the International meeting at the end of the project.

#### 2.3 Summative evaluation (internal audit)

Previous to the presentation of the interim and final report, an internal audit will check if the main results, recommendations and statistical data obtained during the project, and the main administrative and financial details on the projects' progress agree with the project requirements.

The output of the summative evaluation is used for reporting to the EC and used therefore as guide the LLP final report assessment sheet.

The aim of internal assessment is to provide the partnership with internal evaluation tools of its activities and facilitate the partners in controlling and monitoring each step of the project.

Each partner has to fulfil and deliver the following reports, at the end of every trimester. All the documents have to be delivered to the Project coordinator.

The reports are:

- *Valorisation activity form* deals with all valorisation activities e.g.: presentation, conference, publication, information about the project on website, meetings, and others.
- *Progress reports* enumerate the activities carried out by each organization, referring the monitored period.

#### 2.4 Evaluation Methods

In the evaluation a mixed method of combining quantitative and qualitative data is used. The tools used for that are:

- Survey questionnaires;
- Interviews (in-depth; during project meetings and by telephone/Skype);
- Documents Study (Validation model, project reports, minutes, newsletters, leaflet, e-communication between partners, material developed for the project, etc.);
- Statistics like: number of stakeholder groups per country? How many persons applied to attend the learning community? How many persons participated? How many persons took part in the national stakeholders meeting? Target respondents: partners, participants.
- Critical friends

#### 2.5 **Purpose of this report**

The results of the peer review are summarized in this report. The purpose of this reports is threefold:

- To describe the peer review process;
- To provide the EACEA information about the peer review;
- To identify strong and weak points, identify measures to be taken and already taken in the project process.

#### 2.6 Progress

This report is being written during the project and therefore in progress. As the project continues more information is gathered and placed in this report. Mentioned in the workplan (Appendix 1) is:

Table 1: Deliverable D6.2 Quality

D 6.2	Evaluation reports & peer reviews (Report)	M 5 (4-2014),15 (2-2015), 22 (9-
		2015) (input on project
		proceedings) M18 (5-2015), 36
		(12-2016) (input interim and end
		reports to EACEA)

The next table provides information about the progress of this report and period of review. In chapter 4.3 an overview is given of the changes in the different versions.

Table 2: Validity report period

Μ	Date	Purpose	valid period
5	4 - 2014	input on project proceeding	$\checkmark$
15	2 – 2015	input on project proceeding	V
22	9 – 2015	input on project proceeding	
18	5 – 2015	input interim report	$\checkmark$
36	12 - 2015	input end report	V

Forse c'3 The peer review process

#### 3.1 Instruments used

This report reflects the peer review used by the consortium in the FAMT&L project consisting of:

- 1. Four eyes principle
- 2. Survey questionnaires
- 3. Interviews (in-depth; during project meetings and by telephone/Skype)
- 4. Documents Study (Validation model, project reports, minutes, newsletters, leaflet, e-communication between partners, material developed for the project, etc.),

#### 3.1.1 Four Eyes Principle

The consortium has 'Four Eyes Principle" in place to be used when appropriate to deliverables and plans. The Four Eyes Principle practice ensures:

- Quality of deliverables
- Consistency in project
- Transparency

The Four Eyes Principle is used in various ways:

- Project meetings;
- Virtual meetings;
- Written.

#### 3.1.2 Survey Questionnaires

The review of process and project meetings is done by questionnaires (appendix 1). If necessary the results and analysis of these questionnaires were used to agree on changes made in planning and content.

#### 3.1.3 Interviews

During project and virtual meetings partners responsible for work packages present their plans and content. In discussion and interview these can be validated and if considered appropriate changed with mutual consent. Conclusions will be summed at the end of each meeting and written in meetings minutes.

#### 3.1.4 Documents study

All documents and appropriate deliverables are sent to all partners with the porpoise to comment and validate upon.

#### 3.1.5 Critical friends

Stakeholders are involved in the cycle of development of the FAMT&L-project as critical friends. The role of the critical friends is to question and challenge from the perspective of a teacher-trainer as well as teacher in order to support the reflective process and inform the mid cycle self-assessment.

At this stage of the project the critical friends provide challenges on the:

- Design of the training
- Content of the training

Therefore their expertise lies in:

- 1. Teacher trainer with expertise on curriculum design
- 2. In service teacher

#### 4 Evaluation of FAMT&L Meetings

### 4.1 Bologna: Kick off Bologna Date: 20<sup>th</sup> – 22<sup>nd</sup> February 2014

The kick-off meeting provided the opportunity for members of the FAMT&L project to introduce themselves and explain the role of their organization, along with their role within the project.

The review of the meeting was conducted by an evaluation questionnaire after the meeting which showed a high level of satisfaction, with some minor issues raised.



The results of the questionnaires are reported in the figure below.

Comments: I think that it will be important to spend some moments (or write some documents) describing the different features of curricula and schools in different countries involved in the project, in order to identify the common and the different aims. We told about it but I don't think that's clear enough yet.

To increase the time of the meetings. To have more days for the meetings (for example 3 full days).

With participation of the other researchers of the partners new ideas and suggestions will be added with regard to the implementation of the project. This will enrich the agenda, nevertheless the partners shouldn't forget to keep their focus on their on the main goal of the project.

I still have my doubts on the videoing. I think it is a potential success factor but it's also a very critical factor in terms of time-consuming and technically much effort costing approach for collecting data. Also the video-analysis will be a critical success factor. Please address the videoing with absolute care and attention and guidance!

## 4.2 Paris: Data collection Date: 8<sup>th</sup> – 10 September 2014

The main goals of the meeting:

- Data collection and analysis
- Making and analysing videos for repository

Since the start of the meeting there has been a reorganisation within Inholland, the Dutch partner resulting in a change of manager. This was the first meeting therefore a second goal was to get acquainted with the group of people.



The results of the questionnaires are reported in the figure below.

Comments: I found it difficult to follow since this was my first direct participation within the project.

The use of videos may be of concern, because of privacy-laws, time and technical constraints

Conclusion: There are some doubts about (achieving) the objectives (green bars), as can be seen by indicators 2 and 8. Some of these doubts were not mentioned or not heard. Most indicators are rated 4 (purple bars). There are no low scores.

Objectives of the meeting are not fully reached.

There is concern about the feasibility of the use of and analyses of video.

Overall Successful elements of the meeting

- meeting and interaction with partners
- tasks became clearer for new Dutch participant
- discussions on data and analyses and use of videos
- leadership of project commended in getting all the different and diverse partners together and collaborating successfully

Issues raised:

- backlog for Dutch partner
- Use of videos

#### 4.3 Amsterdam: Training model, Dissemination Date: 11<sup>th</sup> – 13<sup>th</sup> February 2015

The meeting in Amsterdam focused on the dissemination plan and the building of the web repository/use of platform for the training.



The results of the questionnaires are reported in the figure below.

#### Comments: -

Conclusion: There are some doubts about (achieving) the objectives (green bars), as can be seen by indicators 2 and 8. Some of these doubts were not mentioned or not heard. Most indicators are rated 4 (purple bars). There are no low scores.

Objectives of the meeting are not fully reached.

Overall Successful elements of the meeting

- Positive discussions between all participants
- leadership of project commended in getting all the different and diverse partners together and collaborating successfully

Issues raised:

- backlog for work packages
- Use of videos

#### Recommendations

Though all answers from the questionnaires show an overall positive review from the participants, as can be seen in the figures concerning the meetings, changes can be made:

- 1. To reach a more positive review on reaching the objective of meetings by:
- a) Making objectives more visible;
- b) Taking more time for each objective.

Concerns were mentioned about the use of videos. Also some partners are not fully satisfied that all doubts of each partner were clarified. It might therefore be wise to attend to these concerns at the next meeting, thereby:

- 1. making sure that each partner can speak her/his mind and mention this doubt;
- 2. making sure that the problems in making or using the videos are addressed and solutions may be found.

#### 4.4 Nicosia: administration, progress and training model Date: 22<sup>th</sup> – 24<sup>th</sup> September 2015

This meeting follows the interim report and comments made by the EU. There are concerns about:

- progress
- quality assurance
- dissemination

As these items were specifically mentioned. Therefore these were on the agenda for the meeting.

All administrative partners had parallel sessions to talk about the budget and reporting tools.



#### Comments on Parallel Working:

To work in parallel sessions was very well received. It was important to meet with the administrative staff. This gave the researchers and managers the opportunity to address the risks of the project and plan to get back on track.

#### Concerns that were mentioned:

- One problem is delays that occurred with some partners
- The active participation of all teams
- commitment from each partner

Concerns with partners arose from the lack of progress. For many different reasons there a feeling grew that progress was limited. All partners did their utmost to achieve goals and deadlines, but apparently the proved to be unrealistic. This may have caused doubts, but at the end of this meeting these doubts were clarified.

#### Results of actions and plans for future

- We have identified the reasons of the delays and we have formed good relations for each country
- The steps taken to ensure plan outcome are very good, everybody is working well together and accepts each other spirits. Measures taken provide confidence for the future
- I am very happy with the support we give each other

As a result of the interim report and feedback on it, a plan was devised by the consortium to get the project back on track. This plan apparently was well received. Together with the discussion a good foundation was laid for the future.

#### What could be improved?

#### On progress and quality insurance

- Make time for QA (virtual end face-to-face-meetings)
- to list all the tasks we have to do in the future meeting
- To show clearly what we have achieved and what is expected in the future meeting in more detail
- sharing feedback and make a list of what we are going to do

#### Administrative actions

 Maybe it is necessary to make an interim report a month before each meeting. This provides information about actuals/budget

#### General

- Share all materials that will be discussed before the meetings
- Maybe to have more participants from each country
- Booking same hotel
- use tools shared

### 4.5 Locarno: Critical friends provide feedback on training-models Date: 7<sup>th</sup> – 9<sup>th</sup> April 2016

The designed training models were discussed with two external experts gave feedback as critical friends. Subsequently the evaluation approach and evaluation strategy for the pilot training courses were discussed and agreed.



#### Comments on review of training courses

#### Comments on proceedings review on training courses each partner:

Since quality assurance and *review* from critical friends were the main objectives, a large part of the meeting was chaired by the Dutch partner. For each designed training course the following procedure was followed:

- presentation of training course
- questions by critical friends
- questions by partners
- conclusions and suggested improvements
- round-table-check

This way of working proved to be productive and was well received by all participants. Especially the critical friends found this way of working pleasant since it was based on a positive reflection and everybody was involved in the discussion. Their feedback was well received and they felt very welcome. Their expertise, comments and help was appreciated. All partners have responded positively to the suggestions of the CF in the re-design of pilot courses. In the reporting phase, all partners will highlight the changes implemented in the pilot courses as a result of these discussions.

After the presentation of all partners general conclusions were formulated by the Dutch partner and critical friends.

#### Impact on training, general and shared conclusions:

- 1. common parts in the training:
  - a. microteaching
  - b. use of video's to:
    - i. show examples of formative assessment
    - ii. reflect on (parts of) lessons and student and teacher behaviour
  - c. practical component in classical situation
  - d. opening and closing questionnaires
- 2. practice what you preach: make the training formative
- 3. Focus of the training should be the trainee (i.e. the teacher)

#### Benefits of presentations and discussions:

- New ideas:
  - Use of Lesson Study in training
  - Using theory of *Environment of Change* by Cobb-Hollingworth
  - Organise training in professional learning communities
- Presentations and discussions are very beneficial and informative and show lots of different perspectives
- Share common grounds

#### What can be done with the results of this project?

- 1. Since the result of the training should be a change in teacher behaviour, this is most effective if it is done in small steps end therefore is learning over a long period (Life Long Learning)
- 2. To make learning visible over this long period, make use of portfolio and logbook

#### Comments on review of training courses

#### Summary of presented plan

The plan to evaluate the training courses consists of three parts:

- Summative:
  - Questionnaires for trainer and trainee
  - To be done at the end of the training
- Formative:
  - Questionnaire for trainee
  - To be done at beginning and end of training (if possible also intermediate)
- Interviews
  - To check conclusions from questionnaires
  - To be done after training

#### Concerns shared and chosen solutions:

- To get data a lot of forms are used. This might be contra productive. In some courses it is not possible to use the formative evaluation. The choice has been made that all partners use a summative evaluation and try to use the formative evaluation.
- Validation of the results is questionable because:
  - o Of a small response group
  - Potential change in behaviour and/or belief cannot be contributed as a result of the training

There are too many variables to contribute a change in behaviour or belief (entirely) to the training. This issue cannot be resolved.

#### Comments on meeting

#### Commitment of all participants at meeting

There were teachers present from different partners. The discussion about the training courses were not of interest for them. They presumed to learn strategies on formative assessment. Since they were not discussed, we found remarks:

• It will be more interesting to have more realistic examples of situations with teachers

Other concern was the presence of all partners all the time. This was the result of the fact that part of the meeting was in the weekend and the Dutch delegation left on Friday. Remarks made:

- Not on Saturday
- Not in weekend
- Presence of all partners all the time

The fact that the Dutch delegation left before the end of the meeting, was caused by the following:

- Four of the five delegates could not stay on Saturday, and they choose to leave together
- For insurance purposes: there was no possibility to insure all participants in nonworking days abroad

This shows a potential threat, not only for this project, but also for others. Rules and regulations within countries contradict each other. This makes it more difficult to coordinate and reach objectives or reach the objective in a similar way. There is no easy solution. Important is to accept these differences and act on them. This was done and therefore the threat was minimized.

#### Commitment to content

With regards to the work done with our critical friends, there were positive remarks:

- a useful meeting, we worked very intense. Very serious listened to the feedback of the CF. Positive
- Feedback from CF was very well prepared and received. Useful info and feedback was obtained and well received

#### Commitment of new participants

There were a lot of unfamiliar people present at this meeting. The atmosphere in which was worked was very good, apparently contributed by the organisation:

- Perfect organisation, I felt very welcome
- good food

#### Specific concerns

#### Partnership

The sharing of ideas, choices and dilemma's proved to be very valuable for all partners. It was discovered that circumstances within countries are so different that they require individual choices. Some dilemmas were difficult to solve but in a very good harmony between the consortium and critical friends there were solutions devised to all of the dilemmas. It was found that *"being able to really coordinate and synchronise between partners"* (sharing ideas, discuss and make choices) was of great added value. Another valuable outcome was a greater understanding of these circumstances and how this influenced partners' individual actions.

#### Progress

Although a lot of progress has been made in the second period of the project, comments were shared about this:

- for progress:
  - highlight blocking points
  - $\circ~$  describe what is left to do
  - $\circ~$  conclusions of each WP, what has been done and what is left to do

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#### Measures taken

Management and some partners initiated taken steps to resolve some of the issues outside the meeting:

- Partners worked together on deliverables in the period between the meeting in Locarno and the next and last meeting in Bologna
- Extra resources were freed by some partners (extra investment of time)

#### 4.6 Bologna: final meeting and conference Date: 24<sup>th</sup> – 26<sup>th</sup> November 2016

This meeting was organized around three themes:

- Conclusions/results pilot training courses
- final conference
- Reports and deliverables

The experiences and results of the pilot training courses were shared and discussed. Also present for this part of the meeting were the critical friends, who joined the discussion. The final conference was on the second day of the meeting. The state and review of each work package (bilateral meetings between partners) and exploitation with possible follow up were discussed on the last day of the meeting.



#### *Comments on progress*

The following comments were made about the progress of the project:

- Some delay
- Not finishing on time

In the previous meeting this was also addressed. As a measure an overview was made for each WP and deadlines for delivering and reviewing the reports were agreed by partners in bilateral meetings. This ensured each partner knew what was left to do and when it should be finished. Additional result of this way of working was that there was confidence that with the necessary effort the project would finish on time and the goals of the project would be reached.

It was discovered that a lot of work had been done but not everything was distributed among the partners, this work was not always visible for every partner. There were ideas shared, materials were made, but not yet send to a partner responsible for a work package. This resulted in more progress.

#### *Comments on partnership*

The consortium laid high value in cooperation. A good partnership was a necessary condition for a successful project.

- Thanks to all my colleagues
- collaboration was perfect

In previous meetings some issues were raised about the participation of some partners. The difficulties were discussed and solutions were agreed upon by all partners:

- The circumstances in France made it very difficult to organize the designed training. This was discussed before and solutions were agreed (also with the help of the critical friends). The training in France was done in a *Massive Open Online Course* MOOC (see D6.3 for evaluation). It prove even more difficult than previously expected. This was discussed and the issues were resolved in a satisfying way:
  - All partners will support were this is needed
- The French partner will give extra effort
- As a result some feedback from France had not yet been given on the training course. This was also discussed and a common solution/deadline was agreed.

Communication among partners and especially actions from the Dutch partner, responsible for quality assurance, could have been better in this case. The focus was too much on content quality and too little on process.

There was a lot of support between partners to resolve the issues raised and commitment was high.

#### Measures taken

The following measures were taken to ensure finishing the project on time:

- Detailed worksheet for all deliverables were shared
- Agreed deadlines between partners in bilateral talks
- Date of virtual meeting set

Since this was the last meeting, the main focus of the measures was on delivering the materials to the right partner at the agreed deadline.

#### Comments on quality and content

The final product of the project, the webrepository and training models, were discussed:

- Each partner presented the outcomes of their training
- Positive and negative outcomes and comments were shared

Especially the discussions among the partners and their different views on education, culture and assessment, drove the end result to a higher level. Working in a consortium of European countries was important for:

- Process: using the different views and create more mutual understanding
- Content: the exchange of knowledge and skills from the different cultures led to a higher level-outcome

To work in a consortium like this was therefore an essential condition for the success of this project. The result of this project could well be used as a starting point for another project, for instance train teachers as trainers and use the webrepository. The effectiveness of the webrepository could then be greatly enhanced since more people can use it. There is a lot of trust and desire among the partners to continue in this formation.

Comments about this item were:

- No problems but chances, a lot can be done
- The possibilities to a future project together
- I hope we can go on

#### 4.7 Overall view of Project Meetings

The entire group agreed both the organisation and the conducting of the meetings have been good.

They stated the meetings were well organised both online (skype) and life meetings with clear agendas. The goals of meetings could have been more explicit. In some cases the time-schedule was cause for remarks, there was not enough time available for all issues. All information is sent in time to all concerned, and the locations for the meetings were convenient.

#### Issues raised:

- Define explicit goals in the agenda of meetings
- Evaluate progress

#### 4.8 **Project Communication**

Communication within the consortium is seen as satisfactory and effectively facilitated by the project coordinator, with regular multiple means of communication via Skype, email and doodles to arrange meetings. Very regular skype meetings and frequent use of the drop box where all material can be found.

The participation in meetings is high and constructive.

As there always is room for improvement, communication about all the work that has been done could be better. In the last meeting in Bologna it emerged that progress was better than thought. Here some partners could have shared more.

#### 4.9 Teamwork

Teamwork seen as very much respected in the project as it's a key element for the success of the project. Teamwork was reinforced by both the project coordinator and the WP leaders. Overall teamwork is positive, with the distribution of responsibilities among WP leaders clear. There was trust between the partners and their individual contribution was well accepted and respected. Where for instance the language barrier caused problems, communicating between some partners in French or Italian solved this and the outcome was shared in English. This way of working was well received and made sure the common goals were achieved.

Initially there was not much involvement from stakeholders in meetings. Efforts were made to involve them. Involvement of stakeholders was intensified as they were critical friends

#### Issues raised:

• Some difficulties in communication and coordination so progress was not always transparent/visible for all partners

#### Some overall conclusions:

- The Italian partner management style was appreciated. It made that there was room for discussion. New participants always felt welcome.
- The partner from Cyprus showed conscientious work of high quality and worked very constructive with all other partners.
- The Swiss partner could tickle partners with critical questions and reflections that forced deep-level thinking.
- The knowledge and skill of the French partner on making videos and using them in a training context was irreplaceable.
- The Dutch partner was an unknown as other partners knew each other from other projects. Contribution of the Dutch partner on teacher training and training models was greatly appreciated.
- Success of this project was reached and could only be reached by the collaboration, using this variety of knowledge and skills.
- Cooperation, support and culture in the consortium was very constructive.

## 5. Comments from Work Package leaders

#### Comments from Work package Leaders on their Role within the Project

Overall the work package leaders are very clear in their role within the project. The Deliverable deadlines were not met in the first half of the project. Extra effort was made in the second half. Due to the size and scope of the project, the point was made that it is important that the focus of the project and work packages remain clearly identified and realised.

#### Issues raised:

- Some deliverables seem to need more time than the time initially provided
- Reasons given included that for the completion of some deliverables, data and experience from other deliverables were necessary to complete their own. This has been accommodated by the project coordinator who extended the deadline

#### Clarity of overall aim and objectives of the project within the group

Overall the group stated the aim of the project was clear and concise. Choices made in the beginning of the project deemed not feasible in later stages:

• A common design of the pilot training course

Through the insight that circumstances, existing beliefs and educational culture in the different countries differ, the choice was made to define common parts in training but be more flexible in the overall design

• The making and use of videos

Two specific concerns were named:

- 1. Privacy
- 2. Technical conditions

The amount of time and skill needed to make videos appropriate for educational purposes, was not present within all partners. Privacy considerations also meant videos could not be used or be put in the web repository. Making videos that could be used proved to be very difficult and most of the times an unreachable goal.

The consortium still sees a great added value in the use of videos as an educational strategy for (in-service) teachers. The defined grid is a very

good tool to use for observation and analysing practical situations of classroom formative assessment.

To do justice to the overall aim of the project, building a web repository and analysing videos with the designed grid, the choice was made:

- 1. To use videos already available or from partners
- 2. To use the grid, or part of, in observations of classroom formative assessment
- The use of the Espace Platform

The choice was made to use the Espace platform. Resources were punt in place to accommodate this. During the further development in the project it was discovered this proved too difficult.

The platform could be used for *"distance learning"*. At first this seemed to be of added value for the consortium. Later it was discovered that face-to-face learning was more appropriate for the circumstances. The effectiveness of *distance learning* in the change environment of teachers is as of yet an unfamiliar and unproven way of learning. This might be of great interest for a follow up.

#### Strengths of the project identified

- Commitment and exchange from various partners and project management
- The project is well managed and are partners committed to work together on addressing dilemmas
- Strong complementary partnership and coordination
- It addresses a very important issue in education, the use of classroom formative assessment
- Changing teacher belief and behaviour on the basis of:
  - o Practice
  - Reflection
  - o Choices and needs of the individual teacher
- Building relations and network in and outside the consortium
- The use of video in teacher training and how to organize this

#### Weaknesses of the project identified

• Quality assurance had too much focus on evaluation and quality of content and too little on process

- Teachers changing their beliefs and especially behaviour takes a lot more time than any traditional training model can provide
- The focus on making own videos of classroom formative assessment in the training as teachers don't have the time nor skill to do so

#### Main opportunities offered by the project

- The opportunity to establish a good European network, with a wide variety of stakeholders and skills
- Learning from each other; cross-fertilisation among various disciplines (technical, educational, social, didactical etc.)
- Networking Building of a long term strong international network
- Exploring the field from a different perspective and also the discussions and exchange of ideas and experiences among partners and associate partners
- Possible follow up identified in consortium :
  - Long-distance learning in teacher training
  - Lifelong learning in teacher training
  - Effective training that causes a sustainable change in teacher behaviour in using classroom formative assessment, combined with lifelong learning
  - How to implement strategic classroom formative assessment in schools

#### Main threats identified in the project

- Long term commitment after the end of the project shouldn't be taken for granted clear risk that the momentum gets lost when the project ends
- Difficult to have all partners and stakeholders to get involved, given the limited resources and high expectations, to work together
- ambitious goals
- Sustainability after EC funding stops

#### Involvement of stakeholders

Involvement of the following stakeholders was direct and had a large contribution:

- (In service) teachers:
  - o Questionnaires
  - Participated in training
  - As critical friends
  - Conferences outside consortium
- Teacher educators:
  - $\circ~$  As critical friend
  - In partners networks

- Students
  - $\circ$  Questionnaires

#### Suggestions for better involvement of stakeholders:

Very important stakeholders who were not represented in the project but are critical for successful implementation of strategic classroom formative assessment, are:

- Principals and school councils
- Educational leaders
- Parents

They were not directly targeted since the do not seem to play a significant role in achieving the objectives of the project. However the play a very important role in a successful implementation in several aspects improving teacher skill in the use of strategic classroom formative assessment.

#### Views on Stakeholder Satisfaction

- Satisfaction of students was not measured
- (in service) teachers who participated in the pilot training showed satisfaction (see deliverable 6.3, review of pilot training courses)
- Challenges remain in the involvement of associated partners, such as principals and educational leaders

#### Suggestions on how to improve the quality assurance of the project

- Continue to link with external evaluator to determine whether the project is meeting its objectives
- Continuous monitoring of process quality and progress

# 6. Status of Work Package Deliverables - Outputs /Products/Results to Date

All deliverables required for the project have been documented. Each deliverable has been checked crosswise by the partners with a peer review procedure (see grids peer review in the Dropbox).

#### 7Annexes

- Annex 1: Deliverables
- Annex 2: Meeting evaluation form
- Annex 3: Deliverable checklist

Annex 4:D	Declaration	of	independence	critical	friends
	Declaration		macpenaenee	Untiour	monas

## **DELIVERABLES - OUTPUTS / PRODUCTS / RESULTS**

	WORK PACKAGES
	WP 1 – Project Management
el. No.	Title and type of outputs/ products/ results
1.1	Report of the Meeting Minutes (Meeting Minutes)
1.2	Collaboration Tools (Intranet & Mailing List for Consortium)
1.3	Partner Agreement
1.4	Mid-Term Activity Report (Project Report)
) 1.5	Final Activity Report (project Report)
0 1.6	Sustainability Plan (Planning Document)
	WP2 - Educational/learning needs analysis of teachers: teachers and students beliefs about formative assessment
Del. No.	Title and type
0 2.1	Instruments for collecting data and information (Instruments for collecting data about mathematics teachers' and students' conception and beliefs on formative assessment in mathematics teaching and learning)
0 2.2	Analysis Report (Analysis Report including the results of the survey and directions for the pilot training courses aiming to improve beliefs emerged in survey)
	WP3 - Educational/learning needs analysis: practices of teaching and formative assessment of the mathematics' teachers
el. No.	Title and type
3.1	Methodology (Methodological guide)
3.2	Data collection (Data collection base)
) 3.3	Data analysis (Data analysis)
0 3.4	Selection and Indexation of data (video analysis, tools,) for construction of the web repository (Definitio of training needs of the teachers indication of situations / methodologies / tools may be used in the construction of the repository.)
	WP4 - Planning and implementing pilot training courses
)el. No.	Title and type
94.1	Tranining Model
110	Implementing of ground pilot training courses in echacle (Local quantic schools)
0 4.2 0 4.3	Implementing of ground pilot training courses in schools (Local event in schools)           Guidelines for mathematical teacher training on the promotion and proper use of formative assessment in mathematics (Guide book)
	WP5 - Development of the web repository
Del. No.	Title and type
) 5.1	Digital materials
) 5.2	Web repository (Online Environment)
	WP 6 - Assessment of pilot training courses and Quality Assurance
Del. No.	Title and type
0 6.1	Integral Quality Assurance and Quality plan (QA Plan) (Report)
0 6.2	Evaluation reports & peer reviews (Report)
0 6.3	Report on 1 <sup>st</sup> and 2 <sup>nd</sup> analysis implementation
	WP 7 - Dissemination
Del. No.	Title and type
7.1	Project web site (Web site)
7.2	Dissemination Strategy (Planning Document)
7.3	Promotion materials (Promotion materials for dissemination)
7.4	Publications (Academic articles and papers)
7.5	Dissemination Prize (Promotion event)
	WP 8 – Exploitation
	Title and type
el. No.	
	Exploitation Plan (Plannin Document)
) 8.1	Exploitation Plan (Plannin Document) Agreement of Cooperation
) 8.1 ) 8.2	Agreement of Cooperation with schools (Agreement of Cooperation)
<b>Del. No.</b> D 8.1 D 8.2 D 8.3 D 8.4	

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#### Annex 2

FAMT&L - \_\_\_\_\_ meeting: \_\_\_\_\_

Evaluation Form

#### 1. Please indicate on which days you attended the meeting

Thursday afternoon	
Friday morning	
Friday afternoon	
Saturday morning	

2. To what extent do you agree or disagree with the following sentences

I don't agree (1)

I completely agree (4)

	1	2	3	4
The objectives of the meeting were clear				
The objectives of the meeting were achieved				
The distribution of time was well planned.				
We had enough time to discuss the subjects.				
My participation was well accepted.				
My suggestions were considered by the leadership.				
The coordination has promoted the participation of all				
partners.				
The doubts of the partners were clarified.				
The team spirit was constructed.				

#### 3. Were the conclusions of the meeting clear?

Yes, at all levels	
Only on some issues	
No, they weren't	

#### 4. The material conditions were ensured?

(1) Yes, absolutely.	
(2) Yes, partially.	
(3) No.	

5. If you answered 2 or 3, please explain what is important to provide in future meetings

## 6. Suggestions to improve the future meetings

## 7. Please identify eventual problems relating to the project development

## 8. Please provide any other specific comments you have

## Annex 3

#### Deliverable checklist

Please attach when submitting project deliverables

Project acronym : FAMT&L		
Deliverable n <sup>o</sup> :		
Deliverable title :		
Format		
<ul> <li>The document is conform to the format specification e.g. the correct logo is used, the cross-references and pagination is correct, etc.</li> </ul>		
Language		
<ul> <li>The document is checked for grammar and spelling mistakes</li> </ul>		
Content		
<ul> <li>The content of the document is coherent itself and contains all the information necessary for its comprehension</li> </ul>		
Structure		
<ul> <li>The documents structure itself, e.g. footnotes or endnotes are numbered in sentence</li> </ul>		
Reviewer:		
partner:		
Name:		





#### Annex 4





Executive Agency, Education, Audiovisual and Culture

#### Declaration of independence as critical friend

Undersi	igned,
name	Marga Baalbergen
adress	De Ruiterstraat 3
	2202 KG Noordwyk

was asked and participated as critical friend for the project:

FAMT&L Formative Assessment in Mathematics for Teaching and Learning

Project Number: Life Long Learning Programme n° 538971-LLP-1-2013-1-IT-COMENIUS-CMP Grant Agreement: 2013 – 4030 / 001 - 001

by the institution:

Inholland, University of applied Sciences

On behalf of the consortium participating in the project.

and hereby declare not to have any ties, family or other, direct nor indirect, as private person, researcher / teacher with fore mentioned institution or any other participating in the project concerned therefore able to obtain the role as an independent critical friend.

Place

Pic

Date

11 mei 2016

Signiture:





Executive Agency, Education, Audiovisual and Culture

#### Declaration of independence as critical friend

Undersigned angedin name adress Netter lands nonterday

was asked and participated as critical friend for the project:

#### FAMT&L Formative Assessment in Mathematics for Teaching and Learning

Project Number: Life Long Learning Programme n° 538971-LLP-1-2013-1-IT-COMENIUS-CMP Grant Agreement: 2013 - 4030 / 001 - 001

by the institution:

Inholland, University of applied Sciences

On behalf of the consortium participating in the project.

and hereby declare not to have any ties, family or other, direct nor indirect, as private person, researcher / teacher with fore mentioned institution or any other participating in the project concerned therefore able to obtain the role as an independent critical friend.

Place <u>Amsterdam</u> Date <u>26-04-2016</u> Signiture: Mangedijh.