



D4.1: Cluster meetings



Introduction



Introduction

Work Package 4 is the focus for intervention with teachers and students to implement the toolkit of approaches designed in WP3. There will be feedback into WP3 through cluster meetings to develop and adapt the resources to meet local contexts as the project develops in year 2.

The two first deliverables of the Work Package 4 (D4.1 and D4.2) are presented in this document. The third deliverable (D4.3) is presented in a separated document. The two deliverables D4.1 and D4.2 concern the work done jointly by researchers and teachers in the perspective of design-based research.

D4.1) Cluster meetings: Local groups of schools and HEI's to share practice and progress monthly [month 25] D4.2) School visits: Classroom visits for HEI partners and evaluator(s) monthly [month 25] (DOW, Workplan table, page 11)

All partners have a cluster of schools to implement the formative assessment approaches developed in WP3 in sciences and/or mathematics. Local cluster meetings and school visits have been organised since the beginning of the WP4 (January 2015) and also before this date, due to teachers' engagement and schools initial contacts, in order to develop case studies that have taken place mainly between March and December 2015. Among partners, four are working with both sciences and mathematics teachers (NUIM, ENSL, HiST and DUE) while the other five are working with mathematics teachers.

Although cluster meetings with all the partners have not been scheduled monthly, however, meetings with teachers coming from several schools have been organised monthly (or even more frequently). Due to local contexts and in order to better plan the work with schools, the different meetings with teachers within each school have been arranged. During the WP4 period (from January 2015 to the end of January 2016), three hundred and seventy one (371) meetings between researchers and teachers have been organised by the FaSMEd teams. The objectives of these meetings as well as their agenda are given in the next pages.

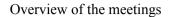
All FaSMEd meetings between researchers and teachers are presented in two parts.

The first section "Overview of the meetings" is a summary of all of these meetings in a great table where we distinguish:

- Cluster meetings that correspond to meetings with all partners, teachers, headmasters, researchers,
- School visits that correspond to visits with one (or several) school(s) where teachers and researchers have worked on formative assessment lessons, the use of technology, and the preparation of observations,
- The line "Observations" corresponds to observations in class made by HEI.
- And finally, the line "Interviews and q-sort activity" corresponds to all meetings where students and/or teachers have been interviewed (using q-sorting or not).

The second part of this document details in one table for each partner the different Cluster meetings providing a more detailed description of the objectives and the content of each meeting. For School visits, Observations and Interviews, see D4.2)







UNEW: George Stephenson High School, St Thomas More and Park View School

UNOTT: De Ferrers Academy, Trinity School, Bagthorpe Primary School

ENSL: Lycée Parc Chabrières, collèges H.Barbusse, Fontreyne, Elsa Triolet, H.d'Urfé, N.Conté, Ecoles Parmentier, S. de Beauvoir

	2014	01/2015	02/2015	03/2015	04/2015	05/2015	06/2015	07/2015
Cluster meetings	UNEW (22/11)			UNEW (24/03)				UNEW (6/07)
	UNOTT (26/11)			UNOTT (26/03)				ENSL (1/07)
	ENSL (18/06, 10/12))						
School visits	UNEW (17/12)	UNEW (6/01,	UNEW(9/02,	UNOTT (19/03,	UNEW (1/04,	UNOTT (21/05)	UNEW (9/06,	
	UNOTT (6/10,	7/01, 20/01,	11/02, 24/02,	30/03, 31/03)	23/04))		11/06, 19/06)	
	23/10, 11/11, 18/11)	21/01, 28/01)	25/02)	ENSL (3-6/03, 30-	UNOTT (2/04)		UNOTT (3/06,	
	ENSL (3/07, 18/09,	ENSL (20/01,	UNOTT (5/02,	31/03, 30/03)	ENSL (1/04, 2/04,		4/06, 16/06)	
	6/10, 16/10, 6-7/11,	28/01, 29/01,	10/02, 12/02)		4/04, 7/04, 10/04,			
	12/11, 19/11, 26/11)	30/01)	ENSL (2/02, 4/02,		20/04)			
		·	10-11/02, 23/02)					
Observations	ENSL (10/12)	ENSL (6/01)	UNOTT (23/02,	UNEW (2/03, 4/03	ENSL (13-15/04)	UNEW (6/06)	UNEW (17/06,	UNOTT (15/07)
			24/02, 25/02,	10/03, 11/03,		UNOTT (6/05,	22/06)	
			26/02)	17/03)		7/05, 12/05, 13/05,	UNOTT (3/06,	
			ENSL (2/02, 10-	UNOTT (5/03,		14/05, 15/05)	15/06, 16/06,	
			11/02)	11/03, 12/03)			18/06, 25/06, 26/06	
				ENSL (3-6/03,				
				16/03)				
Interviews and q-	ENSL (4/11)	ENSL (6/01,	ENSL (11/02,		ENSL (14/04)	ENSL (4/05, 5/05,	UNEW (22/06)	UNEW (8/07,
sort activity		22/01, 28/01)	25/02)			26/05)	ENSL (11/06)	13/07:15/07,
								16/07)
								UNOTT (7/07,
								8/07, 15/07)

UNEW : George Stephenson High School, St Thomas More and Park View School

UNOTT: De Ferrers Academy, Trinity School, Bagthorpe Primary School





ENSL: Lycée Parc Chabrières, collèges H.Barbusse, Fontreyne, Elsa Triolet, H.d'Urfé, N.Conté, Ecoles Parmentier, S. de Beauvoir

	09/2015	10/2015	11/2015	12/2015	01/2016
Cluster		ENSL (2/10, 5/10)			
meetings					
School visits	UNEW (30/09)	ENSL (12/10, 13/10-16/10)	UNEW (26/10)	UNEW (2/12, 10/12)	UNEW (22/01)
		UNEW (14/10, 22/10)			
Observations		ENSL (13/10-16/10)	ENSL (5/11, 26/11	ENSL (2/12, 10/12)	
Interviews and		ENSL (16/10)	ENSL (2/11		
q-sort activity					





NUIM: Colaiste Pobail Setanta, Maynooth Community College, Oaklands Community College

UNITO: Istituto Comprensivo di Vinovo; Circolo Salgari; Istituto Comprensivo di Carcare

AIMSSEC: Fairmount School, Fish Hoek High School, Hyde Park College, Manzomthombo Senior School, Plumstead High School, Rustenburg Girls' High School, South Peninsula High School, Vista Nova Secondary School, Vredendal TVET College, Vuyiseka Secondary School, West Lake TVET College

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	2014	01/2015	02/2015	03/2015	04/2015	05/2015	06/2015	07/2015
Cluster meetings	NUIM (20/11)	NUIM		NUIM (10/03)	NUIM (23/04)		UNITO (23/06)	
	UNITO (27/06)	(26/01)		AIMSSEC			AIMSSEC	
				(26/03)			(18/06)	
School visits	NUIM (5/11, 6/11)	NUIM	UNITO (11/02)	UNITO (9/03,	UNITO (10/04,			
	UNITO (10/09, 8/10,	(12/01,		30/03)	15/04, 16/04,			
	24/10, 7/11, 13/11,	13/01, 14/01)			17/04, 20/04,			
	19/11, 4/12, 10/12,	UNITO			21/04, 22/04)			
	12/12, 16/12)	(14/01)						
	AIMSSEC (2/07,							
	8/07, 23/08, 6/09,							
	30/10, 18/11,							
Observations			NUIM (23/02,	NUIM (3/03,	UNITO (21/04,	NUIM (13/05,		
			25/02, 26/02)	4/03, 5/03, 20/03,	22/04, 23/04)	18/05, 19/05,		
				25/03, 26/03)		20/05)		
						UNITO (4/05,		
						7/05, 8/05, 11-		
						15/05, 18-19/05,		
						20-22/05, 25-		
						29/05)		
Interviews and q-							UNITO (3/06)	
sort activity								





NUIM: Colaiste Pobail Setanta, Maynooth Community College, Oaklands Community College

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AIMSSEC: Fairmount School, Fish Hoek High School, Hyde Park College, Manzomthombo Senior School, Plumstead High School, Rustenburg Girls' High School, South Peninsula High School, Vista Nova Secondary School, Vredendal TVET College, Vuyiseka Secondary School, West Lake TVET College

	08/2015	09/2015	10/2015	11/2015	12/2015
Cluster	AIMSSEC (18/08)	UNITO (22/09, 29/09)	AIMSSEC (15/10)		
meetings					
School visits	AIMSSEC (20/08, 26/08,	AIMSSEC (7/09)	AIMSSEC (12/10, 17/10,	NUIM (13/11)	AIMSSEC (1/12
	28/08)		19/10, 21/10, 22/10)	AIMSSEC (19/11, 30/11)	
Observations		UNITO (28/09, 29/09)	NUIM (13/10, 14/10, 16/10)	UNITO (3/11, 4/11, 5/11,	NUIM (8/12)
			UNITO (1/10, 5/10, 6/10,	9/11, 10/11, 11/11, 13/11,	UNITO (3/12, 9/12, 10/12,
			12/10, 13/10, 19/10, 20/10,	16/11, 20/11, 23/11, 24/11,	11/12, 15/12, 16/12
			21/10, 22/10, 26/10, 27/10,	26/11, 30/11	
			28/10)		
Interviews and			NUIM (20/10	AIMSSEC (20/11, 27/11)	UNITO (1/12, 17/12)
q-sort activity					





UU: Prins Florischool, Roald Dahl school, Henri Dunantschool, Anne Frankschool

DUE: Gesamtschule Bockmühle, Sophie-Scholl-Gesamtschule, Schönstätter Marienschule, Clara Schumann Gymnasium

HIST: Birralee. Saupstad, Strindheim

	2014	01/2015	02/2015	03/2015	04/2015	05/2015	06/2015	07/2015
Cluster meetings	DUE (20/11)	DUE (13/01)	HIST (3/02,		HIST (16/04,	UDE (19/05)		
	HIST (1/04)		24/02)		21/04)			
School visits	UU (10/10, 17/10,		DUE (19/02)	DUE (25/03)	UU (9/04, 16/04)	UU (19/05)	UU (11/06,	
	3/12, 10/12)		HIST (27/03)		DUE ((16/04)	HIST (12/05,	18/06)	
	DUE (14/08)				HIST (13/04	22/05		
	HIST (27/10, 4/12							
Observations			HIST (26/03			HIST (12/05,	UU (23/06,	
						22/05	30/06)	
nterviews and q-						HIST (12/05,	UU (30/06)	DUE (20/07)
ort activity						21/05, 22/05,	HIST (18/06)	
						28/05)		





UU: Prins Florischool, Roald Dahl school, Henri Dunantschool, Anne Frankschool, De Horizon (Amstelveen), De Poolster (Nieuw-Roden), De Wierde (Winsum), De Postiljon (Soesterberg), De Tweesprong (Maarssen), Josefschool (Culemborg), ASV Daltonschool (Amersfoort), Vreewijkschool (Rotterdam), Kon. Julianaschool (Heerjansdam), 't Palet Holy (Vlaardingen), De Meerpaal (Zoetermeer), Het Kompas (Stellendam), Paulus (Castricum), De Windroos (Lelystad), Kabas (Franeker), De Driestam (Eindhoven), 't Hout (Helmond), De Touwladder (St Michielsgestel), Antonius (Heusden), D'n Heiakker (Deurne), Irisschool (Terneuzen), De Rank (Toldijk), Pius X (Haaksbergen), 't Bijenveld (Leuth), Walien (Winterswijk Huppel), Alfonsusschool (Enschede), De Poolster (Nieuw-Roden)

DUE: Gesamtschule Bockmühle, Sophie-Scholl-Gesamtschule, Schönstätter Marienschule, Clara Schumann Gymnasium

HIST: Birralee. Saupstad, Strindheim

	08/2015	09/2015	10/2015	11/2015	12/2015
Cluster		HIST (17/09			
meetings					
School visits		UU (2/09, 9/09, 10/09, 22/09,	UU (1/10, 27/10, 28/10)	UU (4/11, 5/11, 1/11)	
		30/09)			
Observations	DUE (31/08)		HIST (15/10)	DUE (27/11)	UU (1/12, 8/12)
				HIST (19/11)	DUE (21/12)
Interviews and					
q-sort activity					



ENS DE LYON

UNEW team's cluster meetings

UNEW

Date 22nd November 2014

Programme Schools Cluster meeting:

10 – 10:30 Introductions – outline of day and catch up on progress with Fasmed.

10:30 – 12 Formative assessment – shared meaning and experience

12 – 1pm Working on materials

1pm - 2 Lunch

2 – 3:30 Using Classflow 3:30 – 4 Planning next steps

Schools George Stephenson High School, St Thomas More and Park View School

Date 24th March 2015

Programme Schools Cluster Meeting - Agenda 4pm - Welcome and introductions

4.10pm - Small group sharing activity on 'Distance Time Graphs'

4.30pm - Feedback to whole group

4.40pm Schools present reflections on chosen second activity (Candy Cartons/Security

Cameras/Gold Rush) followed by whole group discussion

5.10pm FaSMEd and wider applicability in mathematics teaching

5.20pm Next steps 5.30pm Finish

Schools George Stephenson High School, St Thomas More and Park View School

Date 6th July 2015

Programme Schools Cluster Meeting - Agenda:

4pm Welcome and announcements

4.10pm Activity 1: Where (in your FaSMEd lessons) has formative assessment worked

well? (Examples to be shared in small groups, main points with whole group).

4.30pm Activity 2: Where (in your FaSMEd lessons) has the technology worked well?

(Examples to be shared in small groups, main points with whole group).

4.50pm Comfort break

5pm Activity 3: How could the formative assessment processes and/or technology be improved? (Examples to be shared in small groups, main points with whole group). 5.15pm Activity 4: What impact, if any, has FaSMEd had on your other teaching? What will you take forward, if anything, next year? (Examples to be shared in small groups,

main points shared with whole group).

5.30pm Finish

Schools St Thomas More and George Stephenson High School





UNOTT team's cluster meetings

UNOTT

Date 26th November 2014

Programme Cluster meeting:

16:00 Introductions to the UoN team and schools' representatives.

16:00 - 17:30 Presentations and discussion on the background to the project, the aims and objectives, the meaning of formative assessment, the research focus and the toolkit. 17:30 - 17:45 Discussion about ways of working, practical arrangements and next steps.

17:45 - 18:00 Discussion in school groups about issues and next steps.

Schools All partners

Date 26th March 2015 Programme Cluster meeting.

ramme Cluster meeting. 15.45 Introductions

16:00 presentations by each school providing feedback on the lessons they had planned and delivered in phase one, the technology they had used and what they had learned.

17:00 discussion groups about the research questions and the impact of the technology 17:30 discussion about alternative approaches and the focus for the next phase of

lessons.

Schools All partners





ENSL team's cluster meetings

ENSL

Date 18th June 2014

Programme 14h-15h: Introduction:

- the FaSMEd project and the first works carried out at European level since January,

- the teams and the classes involved in the project,

- the institutional frame.

15h-16h: Organisation of the work during the school year 2014-2015

- methodology of data collection,

- internal communication (among the teams, with the IFÉ)

16h-17h: Formative assessment and the "toolkit"

working groups 17h-18h:

- report of the work,

- first draft of the schedule for the school year 2014-2015,

- conclusion.

Schools All partners

Date 10th December 2014

Programme 14h-14h30 Introduction: report on European partners meeting, introduction of Monica

Panero to the team

14h30-15h10: Teachers' presentation of the first works done in the different schools:

7-8 min each for presenting plans or first realisations (at most 3 or 4 slides)

15h10-16h00: Collective discussion about

- the formative assessment

- the role of technology

- dealing with low achievers.

16h00-17h00: the future teaching experiments:

- context elements to be clarified

- organisation

- elements to integrate in the toolkit

- sharing of experiences

Schools All partners

Date 1st July, 2015

Programme Statement and prospects for the project

the different experimentations in classroomposition relatively to the theoretical framework

- web sites: toolkit and French website

- organisation of experimentation for the first trimester 2015-2016

Schools All partners

Date 2nd October 2015





ENSL team's cluster meetings

Mini Cluster meeting with teachers of primary schools Preparation of observations in the class Programme

Schools Saint-Fons

Date 5th October 2015

Programme Mini cluster meeting all teachers of Vaulx en Velin

preparation of next observationre-teaching Time-distance - dissemination (Website)

Schools Vaulx en Velin



NUIM team's cluster meetings



NUIM

Date 20th November 2014

Programme 10.00-10.30 Introduction to the FaSMEd Team

10.30-12.30 Toolkit 1:

Building on Prior Knowledge and Feedback

Experiences, Difficulties and Principles of Formative Assessment

Analysing student responses to problem solving tasks

Effects of Feedback Identifying Misconceptions

Planning a lesson with Formative Assessment

12.30-1.30: Lunch in Pugin Hall

2.15-3.00: Introduction to 'schoology' for teachers

Schools All partners

Date 26th January 2015

Programme Professional Development Session 2.

10.00: Activity 1 group feedback

10.45: Schoology Update

11.00: Activity 2 Identifying and Responding to Conceptual Difficulties

13.00: Lunch

14.00: Formative Assessment and the role of technology

14.45: Next Steps

Schools All Partners

Date 10th March 2015

Programme Professional Development Session 3.

10.00: Activity 2 Group Feedback10.30: Tour of Colaiste Pobail Setanta

11.00: Activity 3 Improving Learning through Questioning

12.30: Lunch

13.15: Activity 4 Increasing Student Collaboration

14.45: Next Steps

Schools All Partners

Date 23rd April 2015

Programme Professional Development Session 4

9.30: Group Feedback on previous activities 10.30: Activity 5 Students as Assessors

12.00: Next Steps

Schools All Partners



ENS DE LYON

UNITO team's cluster meetings

UNITO

Date 27th June 2014 (2 hours)

Programme First meeting with the teachers and the headmaster and Presentation of the FaSMEd

Project (aims and methodology of the project)

Schools Istituto Comprensivo di Vinovo (To)

Date 23rd June 2015 (3 hours)

Programme - Brief excursus of the activities carried out by the different teachers in their

classes

- Small group activity on the analysis of the worksheets used during the teaching

experiments and discussion

- The use of digital technologies to support formative assessment: analysis of some

videos from the teaching experiments

- Planning of the future steps of the experimentations

Schools Istituto Comprensivo di Vinovo (TO) & Circolo SALGARI (Torino)

Date 15th September 2015 (3 hours)

Programme CLUSTER MEETING:

- Sharing of the results arisen from the reflections developed during the semi-cluster meeting: about the activities in the classes (focus on the worksheets) and about the

support provided by the technology during the activities;

- Presentation of the FaSMEd three-dimensional framework as a theoretical tool that could

support the analysis of the role played by technology during FA processes;

- Analysis of a class discussion, developed during the first phase of the teaching experiments, through the lenses of the FaSMEd three-dimensional framework;

- Presentation of the motion sensor as a tool to introduce time-distance graphs;

– Planning of the second phase of the teaching experiments.

Schools Istituto Comprensivo di Vinovo (TO), Circolo SALGARI (Torino) & Istituto Comprensivo di

Carcare (SV)

Date 22nd September 2015 (2 hours)

Programme SEMI-CLUSTER MEETING:

Analysis of the re-design of some of the activities, carried out starting from the a-posteriori

reflections developed after the first phase of the teaching experiments.

Schools Istituto Comprensivo di Vinovo (TO) & Circolo SALGARI (Torino)





AIMSSEC team's cluster meetings

AIMSSEC

Date 26th March 2015

Programme FIRST CLUSTER MEETING

Introduction of schools and teachers
Report on what has been done in first term

3. Issues arising from first term

Issues arising from
Next steps

5. Discussion

Schools Fairmount, Fish Hoek, Hyde Park, Manzomthombo, Plumstead, Rustenberg, South

Peninsula, Vista Nova, Vuyiseka, West Lake

Date 18th June 2015

Programme SECOND CLUSTER MEETING

1. Welcome and outline of plan for the meeting

2. Cameo slot: Greg Hawtrey (Fish Hoek High School)3. Overview of second term's activities (video montage)

4. Issues arising and next steps

5. Discussion

Schools Fairmount, Fish Hoek, Hyde Park, Manzomthombo, Plumstead, Rustenberg, South

Peninsula, Vista Nova, Vuyiseka, West Lake

Date 15th October 2015

Programme THIRD CLUSTER MEETING

1. Welcome and introduction

2. Overview of different lessons taught in third term

3. Video

4. Revision lesson (introduced by Regis)

5. Questionnaires

6. Issues arising from third term

- Use of big cards for modeling (Jane)

- Use of big cards to end off (Severino)

- Learners' response (Berenice)

- Mini whiteboards (Regis)

7. Next steps

- Consortium meeting

- The FaSMEd movie

- Continued relationship

Schools Fairmount, Fish Hoek, Hyde Park, South Peninsula, Vista Nova, West Lake





AIMSSEC team's cluster meetings

Date 12nd November 2015

Programme CLUSTER MEETING IN VREDENDAL

1. Welcome and introduction

2. Video

3. Discussion

4. Questionnaire

5. Next steps

Schools Vredendal College





UU team's cluster meetings

UU

The work has been organised through schools' visits without large meetings with all schools (See D4.2).





DUE team's cluster meetings and school visits

DUE

Date 20th November 2014

Programme Organisation of School year and visits

Input on formative assessment and formative assessment in FaSMEd

Workshop on reviewing classroom materials

Discussion about technology, school needs, expectations of the project, experiences with

formative assessment.

Schools all partners

Date 13th January 2015

Programme Introduction on the use of the self-assessment materials in the classroom

Discussion about student self-assessment, use of the maths self-assessment materials

Discussion about the use of the biology self-assessment materials during experiments

Schools all partners

Date 19th May 2015

Programme Planning of Case Studies

Discussion of which classes might be suitable for cases in the next school year, planning

of further activities and trials

Schools All Partners



HiST team's cluster meetings



HiST

Date 1st April 2014

Programme Presentation of the EU Fasmed project at meeting with rectors, teachers and

representatives from the local school authorities at Trondheim kommune

Schools Saupstad, Hoeggen, Sunnland, Flatåsen

Date 3rd February 2015

Programme Cluster meeting. Introduction to Fasmed

Schools Birralee. Saupstad, Strindheim

Date 24th February 2015

Programme Cluster meeting. toolkit. Graphs. lesson study planning.

Schools Birralee. Saupstad, Strindheim

Date 16th April 2015

Programme Cluster meeting. Design/redesign. Schools Birralee. Saupstad, Strindheim

Date 21st April 2015

Programme Cluster meeting. Use of technology, graphs, lower achievers.

Schools Birralee. Saupstad, Strindheim

Date 21st May 2015

Programme Cluster meeting/lesson study observation. Redesigned lesson from Birralee to Strindheim

(7th grade).

Schools Strindheim, Birralee

Date 17th September 2015

Programme Cluster meeting. working with graph software: Desmos. Walking-a-graph

Schools Strindheim, Birralee