



FAMT&L

FORMATIVE ASSESSMENT IN MATHEMATICS FOR TEACHING AND LEARNING

Work Package 5 - Development of the web repository

Deliverable D5.1: Digital materials

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Deliverable number	D5.1		
Title	Digital materials		
Type of outputs / products / results			
Delivery date	M15-30 (Dec 2014-Apr 2016)	Dissemination level	<input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)
Nature	<input type="checkbox"/> Report <input checked="" type="checkbox"/> Service / Product <input type="checkbox"/> Demonstrator / Prototype <input type="checkbox"/> Event <input type="checkbox"/> Other		
Language versions	English, Italian, French		
Target languages			
Description (limit 1000 characters)			
<p>The digital materials and contents collected and to be uploaded on the web repository will be:</p> <p>instructional materials, formative assessment tools (e.g. cards, diagrams, etc.), videos (recordings of situations, teaching situations), extracts of movies with text comments or related activities, specific tools for formative assessment, learning objects (LO) created and used for training of teachers, list-references bibliography, site link, glossary, file of project documentation (draft, reports, notices, meeting minutes, articles, etc.).</p> <p>These digital materials and tools of formative assessment will be loaded into the web repository as a methodological resource for planning of the teachers training paths.</p>			

Executive Summary:

The document shows the digital materials and contents collected and to uploaded on the web repository as:

instructional materials, formative assessment tools (e.g. cards, diagrams, etc..), videos (recordings of situations, teaching situations), extracts of movies with text comments or related activities, specific tools for formative assessment, learning objects (LO) created and used for training of teachers, list-references bibliography, site link, glossary, file of project documentation (draft, reports, notices, meeting minutes, articles, etc.).

These digital materials and tools of formative assessment were a methodological resource for planning of the teachers training paths.

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1. Introduction

To introduce the contents of this report it is necessary to consider all project phases that led to develop a specific and local pilot course aimed to improve teachers' skills in assessment.

Initially it had been assumed the implementation of a single virtual environment for the collection and archiving of video, as well as all other materials to support the training course and the work of the FAMT&L research group.

In fact, the researchers thought to upload in this web repository digital material as: instructional materials, formative assessment tools (e.g. cards, diagrams, etc.), videos (recordings of situations, teaching situations), extracts of movies with text comments or related activities, specific tools for formative assessment, learning objects (LO) created and used for training of teachers, list-references bibliography, site link, glossary, file of project documentation (draft, reports, notices, meeting minutes, articles, etc.).

These digital materials and tools of formative assessment were imagined as methodological resource for planning and conducting the teachers training paths.

Afterwards the web repository has been characterized to be only an environment to storage videos and materials related to teaching activities videotaped in classroom.

Instead teaching materials used for the course have been loaded on the e-learning platform (in the Countries that have adopted it) or otherwise used in the presence during each course.

Finally, the documents of the project, the information, the main publications have been loaded into the project's website, or stored in the cloud project folders.

In this document we want to show the main types of materials used and to document the production of support materials prepared and used by each partner. To this end, it seems useful also to make a list of archived materials in the folder of Annex to Deliverable D.5.1.

2. Materials and tools

This section presents the main types of materials for learning or activities promoted during the different courses. Specifically, it is suggested to view such material in the Annex folders, since for every country there were used very specific materials.

2.1 Training tasks

In the last years the teachers' professionalism is an important topic of international research; this has been central in the matter of teacher training, as a strategic factor to improve the national educational systems. (Lovece, 2016)

In particular, a good part of the scientific debate about teachers training activities seems to focus on a fundamental "crux" given by the relationship between theory and praxis, between knowledge and competences, i.e. by the research of how to train the teachers in such a way to get that the information they gain will really develop into new behaviours and competences that will enter into play in their everyday teaching practices.

There are several different contributes to this debate, based on interdisciplinary studies, that seem to validate the idea that a fundamental step for the professionalization of teachers is the identification of the most suitable ways to *conceptualize* their explicit practices in teaching by means of recursive processes, integrated and interdependent among them (observation, comprehension, anticipation or prediction of what happens and can happen after a specific action).

From these premises some indications derive about the most effective methodologies to promote the co-presence of theory and praxis in the teachers training (both in-service or pre-service). Such are many techniques that can be based on the use of specific support tools, such as, in particular, the videos, but also promoting activities in which teachers can do experiences in practices.

The activities proposed during the courses were aimed to help the trainees first-hand to have experience in the concrete expression of what was learned in the classroom. In the given task, then, through simulation experiences of practical situations, the teacher had to have the opportunity to analyse, experiment, critically evaluate pedagogical and didactic knowledge acquired (both general, both disciplinary), co-constructing skills within of a group.

2.2 Video by other sources

Researchers had analysed many studies in which the object was the use of video in teacher training. In general, methods that make use of video in training are classified as "media education" and in particular those which are addressed to teachers can be distinguished depending on the specific use that is made of the video itself (Masats and Dooly 2011):

- as both an object and a tool for observation and analysis, to show a subject to the teachers (*we speak of video-viewing*, in this case);
- as an example or display, when the video shows the practices and the behaviour of experienced teachers in specific situations (*video modelling*);
- as a record of teachers themselves, which is shared with the others, making it an occasion of comparison and debate with colleagues or with a trainer (*video coaching*).

Content, length, aim of a video can be various. For example, a video can be presented as an example of everyday teaching activity (Carbonneau and Héту 2006), or as a “best practice” which rarely could be directly observed, or as a specific experience or experimentation (Santagata and Guarino 2011). In our courses many videos has been used to show specific strategies of formative assessment activities in classroom.

In FAMT&L pilot courses the videos have been used in many ways (see report WP5) and mainly were videos analysed and stored in the project web repository.

However, during the training meetings the partners have also used different videos, from other sources (eg. Teaching Channel). See in detail what video it is and for what purpose were shown during the meetings training (table in 2.5).

2.3 Ppt presentation and materials for theoretical study

A good training requires a thorough understanding of the theoretical references needed to guide and support the practical activities. For this reason every partner has included in its own pilot training program also theoretical materials necessary for the study and deepening of the themes treated in the presence.

These materials were mostly chapters of books, articles, essays, references given to teacher training so that he could still have a valid “basic” knowledge to activate the proper critical thinking that can change their beliefs and to promote a real change, even if long-term, of their practices in the classroom.

In addition, during the lessons in presence it has made use of power point presentations in support of the oral presentation of the contents to be treated and to discuss. The use of slide is common in many classroom settings and training to facilitate the acquisition of information lightening the cognitive load (Cognitive Load Theory, CLT, see; Gagné and Briggs. 1990; Merrill 2001).

A good integration of text, image and multimedia may help to gather information especially if:

- it tries to ensure the centrality of the information, avoiding redundancy and taking into account the previous expertise;
- it uses signaling strategies able to direct the attention on the most significant aspects for purposes of understanding;
- It uses the written text to focus briefly the terms and the essential concepts, accompanied by oral comments to clarify and enrich the selected items;
- It uses images to assist in the care and minimize the cognitive load, re-activate pre knowledge or help build new mental models (Calvani, 2011).

2.4 Task by distance (reflexivity tools)

Researcher studied in theoretical framework that all activities aimed to promote a reflection by teachers on their own practices can't be sufficient to give life to the experience of change in the evaluation practices of the teachers concerned. Therefore, it is particularly important that they are accompanied and supported by instruments and figures to serve as guidance and orientation. Recent researches, in fact, have shown the critical role of driving figures or mentoring to stimulate learning “from” and “in” the experience, highlighting how the professional performance improve when teachers are supported by a guide emphasizing on the connections with their previous experience (Filliettaz 2014).

In this sense it is also important to emphasize the use of strategies and methods drawn by research experiences that show how the video recording for educational practices becomes even more incisive if intertwined reflection and dialogue provoked by questions-stimulus guided by a researcher / facilitator or by the use of tools such as exercises and tasks with questions stimulation or learning diaries that guide the subject to a meta-cognitive level.

To this purpose, we propose two examples of the required activities that accompany teachers throughout the course (these materials are in the Annex folder)

Learning diary

The activities of reflection is guided both by the recall of theoretical materials and / or used in activities in the presence (and therefore with the supervision of the teacher of the course and the tutors in the classroom), and through some questions stimulus to draw attention to part of the students about their own experiences and the convictions that dictate their assessment practices.

Another element of aid is given by the request to make an assessment of the activity in terms of acquiring of knowledge and abilities and specific skills development, but also through the awareness of the strengths and difficulties that have characterized the conduction of the specific activity.

Individual or in group activities

As in the diary, the activities to be carried out individually or in groups (in the classroom or at a distance) require critical reflection by the students on what they usually do in the classroom or on the beliefs influencing their assessment practices. In the classroom the students are divided into small groups who, with the help of the teacher and a tutor, perform specific activities and then, at the end of the lesson, share with other groups the ideas that are emerged.

As can be noted, there is the reference to video, analysed or to be analysed, which shows the integration of the videos themselves and repository in the didactic path with all the methodological elements explained above.

2.5 Lists of materials for each Country

2.5.1 UNIBO – Italy

What (object and aim)	Type (word file, LO, presentation, pdf, etc...)	Use	Where
Lesson 1: A model of educational evaluation in Italy	A brief introduction (Pdf)	Knowledge and theoretical study	Espace Platform (module 1)
Lesson 1: Cap1_Assessment to measure or to learn	Book's chapter (in pdf)	Knowledge and theoretical study	Espace Platform (module 1)
Lesson 1: Cap3_To	Book's chapter	Knowledge and theoretical study	Espace Platform

improve practices	(in pdf)		(module 1)
Lesson 1: Formative Assessment	Ppt presentation	Supporting a face to face lesson	Espace Platform (module 1)
Lesson 1: Some notes_Formative Assessment	Introduction about FA (pdf)	Knowledge and theoretical study	Espace Platform (module 1)
Lesson 2: Document By some association	Article by Teacher Asociacion (pdf)	Knowledge and theoretical study	Espace Platform (module 2)
Lesson 2: Formative Assessment in Mathematics	Article	Knowledge and theoretical study	Espace Platform (module 2)
Lesson 3: Cap4_Self assessment	Book's Chapter (pdf)	Knowledge and theoretical study	Espace Platform (module 3)
Lesson 3: Teory_Mathematics teaching <ul style="list-style-type: none"> ▪ 170 VS 18 2010 ▪ 230 Convegno Tricase ▪ 247 Fandino Introduzion e ▪ Zan_ difficoltà ▪ Zan Errore 	Articles /chapters (pdf)	Knowledge and theoretical study	Espace Platform (module 3)
Lesson 4: Cap 5_Correcting and feedback	Book's Chapter (pdf)	Knowledge and theoretical study	Espace Platform (module 4)
Lesson 5: Cap 6_Strategies to assess	Book's Chapter (pdf)	Knowledge and theoretical study	Espace Platform (module 5)
Activities or tasks: Task for group_1	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices. In the classroom the students are divided into small groups who, with the help of the teacher and a tutor, perform specific activities and then, at the end of the lesson, share with other groups the ideas that are emerged	Espace Platfom
Activities or tasks: Task for group_2	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices. In the classroom the students are divided into small groups who, with the help of the teacher and a tutor, perform specific activities and then, at the end of the lesson, share with other groups the ideas that are emerged	Espace Platform
Activities or tasks: Task for group_2	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices. In the classroom the students are	Espace Platform

		divided into small groups who, with the help of the teacher and a tutor, perform specific activities and then, at the end of the lesson, share with other groups the ideas that are emerged	
Individual activities_0	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices.	Espace Platfom
Individual activities_1	Form to be completed (word)	Starting by the vision of a video, this require critical reflection by the teacher on what they usually do in the classroom or on what and how he/she can change his/her practice.	Espace Platform
Individual activities_2	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices.	Espace Platform
Individual activities_3	Form to be completed (word)	Activity that require critical reflection by the teacher on what they usually do in the classroom or on the beliefs influencing their assessment practices.	Espace Platform
Learning diary	Form to be completed (word)	The activities of reflection by teacher trainees is guided through some questions stimulus to draw attention to their own experiences and the convictions that dictate their assessment practices. Another element of aid is given by the request to make an assessment of the activity in terms of acquiring of knowledge and abilities and specific skills development, but also through the awareness of the strengths and difficulties that have characterized the conduction of the specific activity.	Espace Platform
Designing a FA practice	Form to be completed (word)	Activity to try to design a specific practice using indication and strategies analysed or hypothesised.	Espace Platform
Video: <i>My favorite no</i>	A lesson starter strategy: • Assessing class learning • Giving feedback	The video is an occasion to view a strategy to gather information about student's learning and to reflect on characteristic that a FA practice should have.	https://www.teachingchannel.org/videos/class-warm-up-routine
Video: <i>Show Your Cards!</i>	Use colored cards throughout a lesson to monitor and communicate understanding	The video is an occasion to view a strategy to gather information about student's learning and to reflect on characteristic that a FA practice should have..	https://www.teachingchannel.org/videos/show-your-cards-student-assessment

2.5.2 SUPSI- Switzerland

What (object and aim)	Type (word file, LO, presentation, pdf, etc...)	Use	Where
Documents related to video uploaded on the web repository	Word file: "PianoLezione.docx" "Scheda.docx" "CH_6_SMGR1_2015_01_01_tabella_tempi_ita.docx" (a different word file for each video)	Documents to better understand the situation shown in the video. PianoLezione.docx contains all steps of the lesson; Scheda.docx contains tasks presented by the teacher; *_tabella_tempi_ita.docx contains the dialogue between teacher and student and user guide's indicators.	Uploaded on the web repository (for each video)
"clip_2014-05-22.m4V" Video extra analysis NOT recorded and analysed in classroom for web repository.	Videoclip	Brief video that doesn't represent a FA situation, but for us it was important to show it, to better understand what is a real FA situation and how the teacher in the video could use FA in a better way.	Shown during the course

2.5.3 UCY - Cyprus

What (object and aim)	Type (word file, LO, presentation, pdf, etc...)	Use	Where
"Formative Assessment in the Teaching and Learning of Mathematics"- Introduction	Power Point: "Lesson 1_INTRODUCTION.ppt"	Through this presentation the participants received information about the FAMT&L project (aim, methodology and results), the project results for Cyprus and comparison with the rest countries, the training course and its objectives and a first theoretical overview on formative assessment.	It was shown through projector during the first part of the first lesson of the training.
Nine different papers related to Formative Assessment "Paper 1, Paper 2, Paper 3, etc."	Pdf	These papers/articles operated as tools through which the participants could find information about four dimensions of formative assessment (definition of FA, description (goals, use) of FA, techniques of FA and	These papers were stored on the desktop of each computer and the participants had access to these during the personal study and deepening in the second part of the first lesson of the training.

		differences between formative and summative assessment).	
"links of videos"	Word document: "links of videos"	In this word document, the participants could find some links of videos related to formative assessment from the Teaching Channel site. Through these videos, the participants could find information about the four dimensions of FA.	This word document was also stored on the desktop of each computer and the participants had access to this during the personal study and deepening in the second part of the first lesson of the training.
"Formative Assessment in the Teaching and Learning of Mathematics"- Discussion	Power Point: "Lesson 1_DISCUSSION.ppt"	This presentation was used as a tool for brainstorming about the four dimensions of formative assessment (definition of FA, description (goals, use) of FA, techniques of FA and differences between formative and summative assessment) which the participants were asked to answer using the articles. It was also used for the presentation of the main points of the above dimensions of FA.	It was shown through projector during the second part of the first lesson of the training.
Three episodes of videos - unstructured observation	MP4 file "1.Movie 1" "2.Movie 2" "3.Movie 3"	<p>These short episodes were used for the purpose of the unstructured or exploratory observation where the participants were asked to identify some good teaching and assessment practices and tools or practices not entirely functional for the purpose of the formative assessment. The analysis of these videos was conducted without using a grid of analysis.</p> <p>More specifically, during observing the videos, the participants were asked to take notes according to the following points, which were discussed after the end of each video:</p> <p>Positive teachers' actions (generally about teaching and specifically about formative assessment)</p> <p>Actions to improve – Suggestions</p> <p>Formative assessment techniques used by the teacher-students</p>	These episodes were depicted through video projector during the first part of the second lesson of the training course.

		If you were to repeat this episode in your classroom, what would you keep/change/improve?	
Four episodes of videos - structured observation	MP4 file "4.Movie 4" "5.Movie 5" "6.Movie 6" "7.Movie 7"	<p>These short episodes were used for the purpose of the structured observation where the participants were asked to identify some good teaching and assessment practices and tools or practices not entirely functional for the purpose of the formative assessment. However, this analysis of the videos was conducted using a grid of analysis based on some of the indices of the project's grid of video analysis.</p> <p>As the previous part of the video analysis, during observing the videos, the participants were asked to take notes according to the following points, which were discussed after the end of each video:</p> <p>Positive teachers' actions (generally about teaching and specifically about formative assessment)</p> <p>Actions to improve – Suggestions</p> <p>Formative assessment techniques used by the teacher-students</p> <p>If you were to repeat this episode in your classroom, what would you keep/change/improve?</p>	These episodes were depicted through video projector during the second part of the second lesson of the training course.
"Observation and Video analysis"	Power Point: "Observation-Video Analysis_Lesson 2"	This presentation was used as a tool for describing the main points which emerged from the episodes/videos regarding to the four above focus points.	It was shown through projector during the first and the second part of the second lesson of the training.
"60 Tools for Formative Assessment "	Word document: "60 Tools for Formative Assessment.doc"	In this word document, the participants could find a variety of formative assessment techniques which they could use the in their microteaching the next lesson of the training	This word document was also stored on the desktop of each computer and the participants had access to this during the design of their microteaching in the

		course.	third part of the second lesson of the training.
Web repository of the FAMT&L project	Link: http://famtl.scedu.unibo.it/user	This link gave participants the opportunity to visit the web repository of the project and watch more episodes/videos related to formative assessment in order to design their microteaching. (The participants had access to the repository using a password)	The visit of the Web repository of the FAMT&L project, during the design of their microteaching in the third part of the second lesson of the training.
"Formative Assessment in the Teaching and Learning of Mathematics"- Conclusions	Power Point: "Lesson 3_CONCLUSION S.ppt"	Through this presentation the trainers and the participants drew together the elements of formative assessment arising from the course.	It was shown through projector during the second part of the third lesson of the training.

2.5.4 InHolland - The Netherlands

Meeting 1

file	translation	discription
Bijeenkomst 1 training versie 2 handouts.pdf	Meeting 1 training version 2 handouts.pdf	These are handout of the powerpoint presentation used in the first meeting
Bijeenkomst 1 training versie 2.pdf	Meeting 2 training version 2.pdf	These are all the slides in the powerpoint presentation used in the first meeting
Bijeenkomst 1 training.pptx	Meeting 1 training.pptx	The powerpoint presentation used in the first meeting (on theory of formative assessment)
Huiswerkopdrachten van 1 naar 2.docx	Preparation assignments for 1 st to 2 nd meeting.docx	This is an assignment to be done between the first and second meeting
Kijkopdracht bijeenkomst 1.docx	Observation assignment meeting 1.docx	This assignment was done during first meeting

Meeting 2

file	translation	discription
Bijeenkomst 2 training versie 1.pptx	Meeting 2 training verion 1.pptx	The powerpoint presentation used in 2 nd meeting (on effective feedback)
In folder Lesson study		
Werkblad 1E.docx	Worksheet 1E.docx	These worksheets must be used in preparation of the design of the lesson using formative assessment in the lesson study-cycle
Werkblad 2A.docx	Worksheet 2A.docx	
Werkblad 2B.docx	Worksheet 2B.docx	
Werkblad 2C.docx	Worksheet 2C.docx	

Meeting 4

file	translation	discription
Bijeenkomst 4 training.pptx	Meeting 4 training.pptx	The powerpoint presentation

		used in 4 th meeting (reflection on lesson and training)
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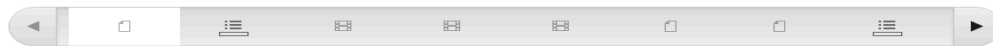
VIDEOS

Title	weblink	discription
Where did they go wrong	http://bit.ly/1hHoJyw	A lesson starter strategy
My favorite no	https://www.teachingchannel.org/videos/class-warm-up-routine	A lesson starter strategy: <ul style="list-style-type: none"> Assessing class learning Giving feedback
Formative assessment: Understanding congruence	https://www.teachingchannel.org/videos/formative-assessment-high-school-math-sbac	Sharing and understanding learning goals and success criteria
Students learn from their mistakes	https://www.teachingchannel.org/videos/students-learn-from-mistakes-ccssmdc	Students collaborative learning from own mistakes
Facilitating peer learning 1	https://www.teachingchannel.org/videos/peer-learning-between-students	Take ownership of math content through dialogue, peer teaching, and presentation
Exit tickets	https://www.teachingchannel.org/videos/student-daily-assessment	Provide quick and effective reteaching with daily tiered assessments
The stoplight method	https://www.teachingchannel.org/videos/daily-lesson-assessment	Use exit slips to assess learning
Dylan Wiliam		Dylan Wiliam defining and explaining formative assessment

2.5.5 UCP – France

For UCP the digital materials have been uploaded on a specific platform and the course was in a MOOC with many web pages and contents. For this reason, in the following scheme there is a brief presentation of them.

<p>MOOC – FAMTL</p> <p>Tools that we used :</p> <p>Two modules :</p> <ol style="list-style-type: none"> 1. Formative assessment ; 2. Links to researches ; <p>For module : formative assessment</p> <p>Tab Presentation : general presentation of the formative assessment using differents researchers definitions, WP1</p>



VOIR L'UNITÉ DANS STUDIO

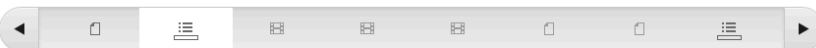
Le concept d'évaluation formative a été introduit en 1971 par Bloom, Hastings et Maddaus. Ils ont formellement avancé l'idée que l'évaluation n'est pas exclusivement réservée aux bilans sommatifs des performances des élèves et argumenté que les enseignants devraient inclure des épisodes d'évaluation formative à l'issue des phases d'enseignement. Au cours de ces épisodes, les enseignants devraient donner un feedback et une correction pour que les élèves puissent améliorer leur travail.

Voici quelques principes à retenir quand on parle d'évaluation formative :

- Instauration d'une culture de classe qui encourage l'interaction et l'utilisation d'outils d'évaluation.
- Définition d'objectifs d'apprentissage et suivi des progrès individuels des élèves vers ces objectifs.
- Utilisation de méthodes d'enseignement variées pour répondre aux besoins diversifiés des élèves.
- Recours à des méthodes diversifiées pour évaluer les acquis des élèves.
- Feedback sur les performances de l'élève et adaptation de l'enseignement pour répondre aux besoins identifiés.
- Implication active des élèves dans le processus d'apprentissage.

Dans cette perspective, il est nécessaire d'instaurer un climat sécurisant permettant aux élèves de faire des erreurs en classe et que celles-ci puissent être présentées à tous.

Tab, test to collect the belief of the teachers about the definition of formative assessment : using the QCM, the aim of the questions was to collect the teachers's beliefs about formative assessment



VOIR L'UNITÉ DANS STUDIO

TEST DE POSITIONNEMENT (1 point possible)

Ce test de positionnement comporte 5 questions et prend au maximum 7min pour le faire.

Vous pouvez le refaire autant de fois que vous le voulez.

1. Pour vous, l'évaluation formative est un outil nécessaire pour

- Avoir une évaluation de l'ensemble de la classe
- Permettre de réaliser de l'enseignement différencié
- Avoir un temps d'interactions avec la construction de sens des élèves
- Permettre de structurer les séquences d'enseignement

2. Quelles techniques ou outils utiliseriez-vous pour mettre en oeuvre un dispositif d'évaluation formative

- Soumettre une tâche à réaliser par le groupe
- Réaliser des entretiens individuels pour mieux cibler les difficultés
- Développer les compétences nécessaires à l'analyse des erreurs et aux stratégies pour dépasser les difficultés

Videos to understand and illustrate: 4 videos from the Web (online) which present some ideas about formative assessment

1. The first one is a video of Marc André Lalande, canadian professor, consulting professor
2. The second one suggests some rules of formative assessment by using an adapted iconography
3. The third describes the types of feedback the teacher can do to his or her students;
4. The fourth aims to present the speech of a researcher, former rector Jean-Marc Monteil, who talks about the victims of the assessment.

Videos to show class situations:

- The first video offers an explanatory animation;
- The second video offers a no-note approach;
- The third video presents a participatory approach.

The third video is a video from our corpus of data. This video has been selected as it reports on time management in the formative assessment process.

A video to understand the management of the regulation of interaction during a formative assessment process.

A video from the research corpus built for the FAMTL project is used here. Part of the analysis of the interaction produced for the project is used here.



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VIDEO



INFO DE DÉBOGAGE POUR L'ÉQUIPE PÉDAGOGIQUE

Proposition d'une analyse macro de la vidéo, son syllabus :

Temps/Durée	Contenu des actions	Analyse
00 :00=>00 :02	Consigne : sortir son cahier des exercices, rappel des numéros d'exercices à faire, logiciel pour lire un pdf, qui va au tableau ?	L'organisation et la consigne => issue de la préparation de l'enseignant, pratique hors classe

Definition proposed by the research consortium.

The definition proposed here is based on the work of a research consortium for this project.

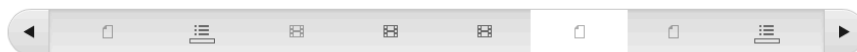
↳ L'évaluation formative

La plateforme, un outil au service de la capsule

L'évaluation formative

D'autres approches

↳ [Liens vers la recherche](#)



VOIR L'UNITÉ DANS STUDIO

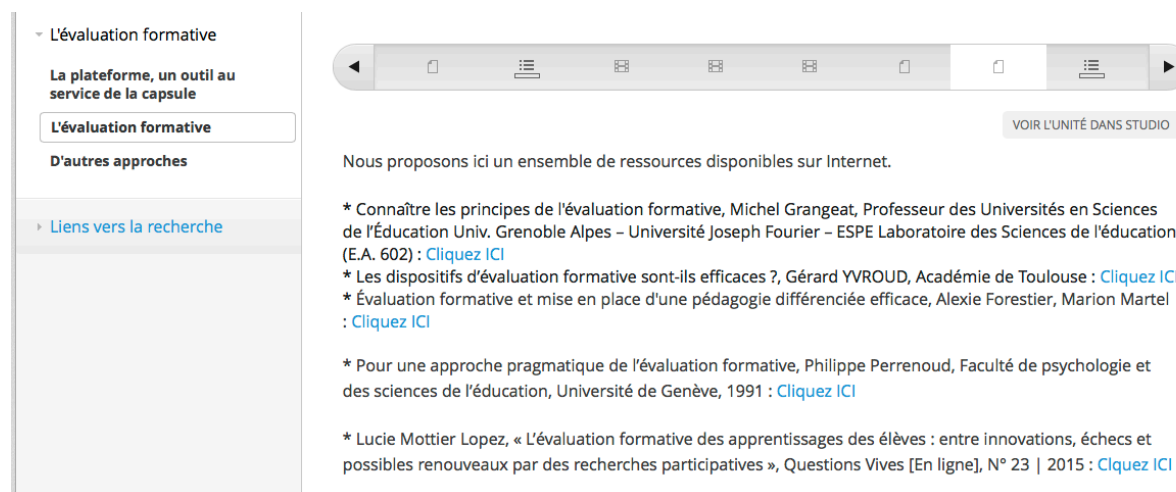
La définition retenue par le consortium de recherche est la suivante.

L'évaluation formative se lie à l'apprentissage dans la perspective où tous les élèves sont capables d'acquérir, à un niveau adéquat, les compétences de base d'une discipline. L'apprentissage passe par l'utilisation de méthodologies d'enseignement qui peuvent répondre efficacement à différents temps d'apprentissage pour chaque apprenant, à leurs différents styles d'apprentissage, à leurs zones de développement proximal.

L'évaluation formative :

- Fait partie du processus d'enseignement-apprentissage et permet de le réguler ;
- Identifier, de manière analytique, les forces et les faiblesses de l'apprentissage de l'apprenant, afin de permettre aux enseignants de réfléchir et de modifier leurs propres pratiques ;
- Permet une forme de rétroaction formative pour établir un dialogue entre l'enseignant et l'apprenant pour concevoir des interventions éducatives ;
- Promouvoir et favoriser l'apprentissage de tous les élèves grâce à un enseignement différencié qui assure à chaque élève des rythmes différents et différentes stratégies d'enseignement et d'apprentissage ;
- Implique l'apprenant dans l'analyse de ses propres erreurs / faiblesses et sa propre capacité à promouvoir l'auto-évaluation et la participation active au processus d'enseignement-apprentissage.

The knowledge base provides a series of references from the project bibliography



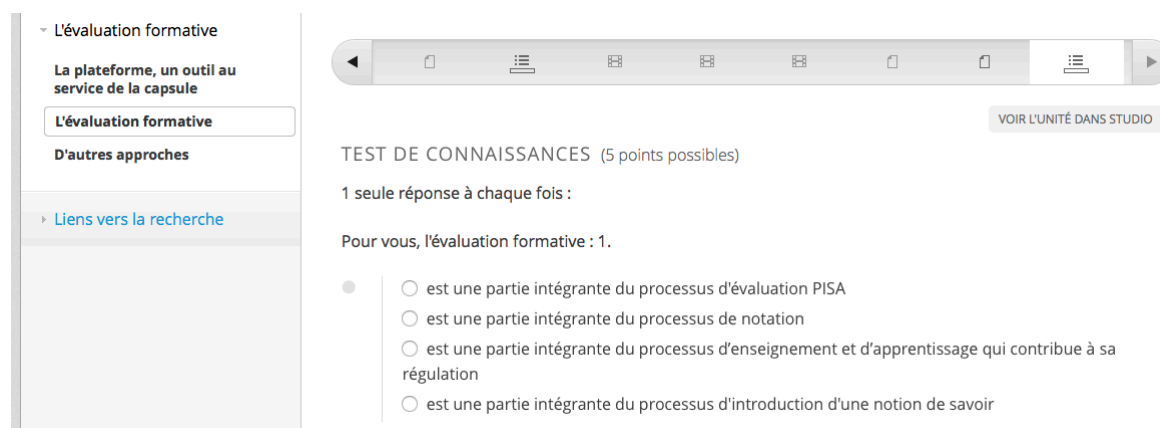
The screenshot shows a web interface with a sidebar on the left and a main content area. The sidebar has a dropdown menu for 'L'évaluation formative' with options: 'La plateforme, un outil au service de la capsule', 'L'évaluation formative', and 'D'autres approches'. Below this is a link 'Liens vers la recherche'. The main content area has a navigation bar at the top with icons and a 'VOIR L'UNITÉ DANS STUDIO' button. The text in the main area reads: 'Nous proposons ici un ensemble de ressources disponibles sur Internet.' followed by three references:

- * Connaître les principes de l'évaluation formative, Michel Grangeat, Professeur des Universités en Sciences de l'Éducation Univ. Grenoble Alpes – Université Joseph Fourier – ESPE Laboratoire des Sciences de l'éducation (E.A. 602) : [Cliquez ICI](#)
- * Les dispositifs d'évaluation formative sont-ils efficaces ?, Gérard YVROUD, Académie de Toulouse : [Cliquez ICI](#)
- * Évaluation formative et mise en place d'une pédagogie différenciée efficace, Alexie Forestier, Marion Martel : [Cliquez ICI](#)

Two more references are listed below:

- * Pour une approche pragmatique de l'évaluation formative, Philippe Perrenoud, Faculté de psychologie et des sciences de l'éducation, Université de Genève, 1991 : [Cliquez ICI](#)
- * Lucie Mottier Lopez, « L'évaluation formative des apprentissages des élèves : entre innovations, échecs et possibles renouvelés par des recherches participatives », Questions Vives [En ligne], N° 23 | 2015 : [Cliquez ICI](#)

The test of knowledge is taken from the questionnaire to test the representations of the teachers.



The screenshot shows a web interface for a 'TEST DE CONNAISSANCES' (5 points possibles). The sidebar is identical to the previous screenshot. The main content area has a navigation bar and a 'VOIR L'UNITÉ DANS STUDIO' button. The text reads: 'TEST DE CONNAISSANCES (5 points possibles)' and '1 seule réponse à chaque fois :'. Below this, it says 'Pour vous, l'évaluation formative : 1.' followed by a list of four radio button options:

- est une partie intégrante du processus d'évaluation PISA
- est une partie intégrante du processus de notation
- est une partie intégrante du processus d'enseignement et d'apprentissage qui contribue à sa régulation
- est une partie intégrante du processus d'introduction d'une notion de savoir

The module of other approaches proposes 5 videos each proposing another approach of the assessment: summative, diagnostic, with criteria and the point of view of the tools.

Finally, the last module is about:

Links to research: questionnaires from the FAMTL project and website link and a **Satisfaction survey.**

3. REFERENCES

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- Lovece, S. (2016) The use of video in a teacher training course to promote the correct use of formative assessment for improving Mathematics teaching and learning, in: Educating the Best Teachers: a Challenge for Teacher Education Proceedings of the 41st Annual ATEE Conference, Brussels, Belgium, ATEE (Association for Teacher Education in Europe), pp. 106 – 114.
- Masats, D., and Dooly, M. (2011). Rethinking the use of video in teacher education: a holistic approach. Teacher and Teacher Education, no. 27: 1151-1162.
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