

## FRANCE [6] - 2013

### SOFTWARE APPLICATION FOR MONITORING LEARNING

#### A. BASIC INFORMATION

<b>Country:</b>	France
<b>Title of initiative:</b>	[FR] <i>Conception, développement et diffusion d'un logiciel de suivi des apprentissages</i> [EN] Design, development and distribution of a software application for monitoring learning
<b>Coordinator/ Organization:</b>	Pierre Lacueille (pierrelacueille@gmail.com) Doyen des IA-IPR Rectorat de Bordeaux
<b>Key competences addressed:</b>	All competences prescribed in secondary school competency framework (common core of knowledge and competences used in compulsory and vocational education)
<b>Type of initiative and channels used for implementation</b> (e.g. curriculum reform introduced through legislation etc.)	Initiative at level of regional education authority ( <i>Académie de Bordeaux</i> ) in particular to assist setting-up of common core.
<b>Partners:</b>	None
<b>Scope:</b> (student/teacher/school level; local/regional/national)	Students and teachers in regional area
<b>Learning context:</b> (formal or non-formal)	Formal
<b>School education level/s:</b> (primary, lower secondary, upper secondary)	Lower secondary and upper secondary (including vocational education)
<b>Target groups:</b>	Teachers
<b>Time frame:</b> (start and end date)	September 2012 - June 2014
<b>Relevant links:</b>	None

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## B. SUMMARY

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The project consists in the development and deployment of a software application for monitoring competency-based learning. In its architecture, the software favours an approach through complex tasks and highlights the links between complex tasks, skills and the resources brought into play (knowledge, skills, and attitudes). It also opens the way to remedial strategies by easing the identification of pupils' difficulties related to the mastering of real competences in complex tasks solving. The software will offer various ways of resolution, with well-fitted resources adapted to pupils needs.

## C. IN DEPTH INFORMATION

### Rationale/contextual background/motivation for introducing the initiative/reform:

Teachers were faced with difficulties in setting up a monitoring system for pupils' learning in the context of competency-based teaching, with regard to complex tasks. Existing software often only offers training on a simple compilation of elementary skills mastered by the pupil without taking into account the resources they need to be able to handle in order to tackle complex tasks.

### Objectives:

The objective of the initiative was to link the assessment of competences with the solving of complex tasks. The software allows to archive past assessments and makes suggestions on how to address the lack of corresponding resources (knowledge, skills).

### Dimensions targeted by the initiative/reform (e.g. student curriculum, assessment, initial/in-service teacher education, school autonomy etc.):

Competence-based teaching and assessment in the framework of the implementation of the common core as well as initial and continuing teacher training were targeted by the initiative.

### Overall approach (e.g. holistic – existence of an overarching strategy, or targeted approach focusing on a specific dimension etc.):

Each pupil is assessed individually in a multidisciplinary, global way.

The follow-up of assessments through complex tasks allows to analyse the difficulties the pupils encounter, as much in terms of their problem-solving strategy than in terms of the mastery of the resources.

The software is open to the outside and allows for the pupils to be redirected to external training sites and other working tools for resource acquisition.

### Detailed explanation of the key competence/s concerned:

French language skills, foreign language skills, sciences, ICT, humanist culture, social and civic skills, initiative and entrepreneurship.

## Specific subjects concerned or cross-curricular approach:

The focus on complex tasks favours an interdisciplinary approach and the cross-referencing of competency frameworks, which is required in order to devise genuinely complex tasks and identify the necessary resources.

**How the initiative/reform is being implemented** (e.g. process followed, political commitment, consultation with stakeholders and their respective roles, incentives for stakeholders, dedicated funding, teaching material, definition of goals and standards, assessment and evaluation mechanisms, impact on teacher training/professional development and school practices/leadership, scaling-up approach, based on research/evidence? etc.):

Establishment of the terms of reference of the monitoring tool by an interdisciplinary group (6 months).

Competences / complex tasks/ resources architecture.

Drawing up of a model (June-October 2013)

Software development (October 2013-June 2014)

Trial deployment in pilot schools (September 2014-June 2015)

Rollout to volunteer schools

The software is designed by an interdisciplinary group of teachers and secondary school inspectors of the Académie de Bordeaux. Examples of complex situations and types of resources required are devised by the team.

## Present stage/phase of implementation:

Finalisation of the terms of reference

**Pedagogical issues** (issues related to how key competences are being taught to students and how are teachers being prepared to teach them):

A first issue is related to finding pedagogical ways to train pupils to make a real use of their competences while performing various complex tasks. It will be necessary to help pupils to understand that they acquired a number of competences in previous learning and they will need to reinvest such competences in new fields of assessment.

A second issue is related to what could be the use of self-assessment in the building of a real mastery of competences used for completing complex tasks.

A third issue concerns how to assist teachers in identifying and designing comprehensive pathways for resource acquisition to be implemented through complex tasks. Therefore, it would be very important to help teachers to conceive assessments that are not just a compilation of very simple tasks. This issue also applies to the assessment of attitudes.

A fourth issue is related to how to evaluate the added values of the software for monitoring learning, comparing it with traditional pedagogies.

The final issues concerns finding the financial and human resources needed to develop the product, which will be made available to schools as freeware.

**What works well** (to identify enablers):

A shared perception of the notion of what is a complex task and of what is a competence among the members of the group responsible of establishing the terms of reference.

The academic feedback on previously existing digital competency-based assessment tools (“first generation” software such as Gibii, Sacoche, Osiris, Opale, etc.)

**Challenges and how these are being addressed** (to identify obstacles and solutions):

Challenges to be addressed were that the institution in charge needed to be persuaded to allocate the necessary human resources to the software development; an adapted structure needed to be developed for the software to enable a monitoring of the pupil learning; and the teams needed to be supported in order to master the tool.

**Monitoring & evaluation so far/planned, and which methods are being used** (e.g. internal/ external quality assurance, inspection, national assessments, international tests, self-evaluation, formative or summative evaluations):

- Internal monitoring of relevance of assessment situations.
- In classroom tests done by teachers and trainers.
- Study of results from pilot schools.
- Results comparison with others software (both freeware and charged software)

## Impact (e.g. any planned impact assessment?):

An analysis carried out by the regional education authority concluded that existing software were not able to help the pedagogical team to easily implement competence in teaching and assessing processes. As a consequence, the idea of developing a new software was developed. This new product is original because it will offer a panel of resources which can be adapted well to the level of competence of each pupil.

It will be interesting to study the acceptance by families of a tool which could really help their children to improve their results, as such a tool could more precisely identify pupils' specific problems and allow teachers to customize intervention strategies.

There will also be an impact on assessment situations and their linkage with resources.

## Communication of the initiative/dissemination of outputs and activities:

Communication to a targeted audience of schools involved in innovation.

Initial and continuous teacher training.

If the project is successful, the software could be offer to each lower secondary school.

## Additional information:

See document presenting the software and science competency framework.