

COCo activity summary - 2013-2016

This report synthesizes the main results and different actions carried out by the members of the COCo project, from september 2013 to december 2016. It has been redacted by the project members

- Colin de la Higuera and Yannick Prié (Professors at Nantes University)
- Olivier Aubert (Ingénieur de Recherche, financed by the Labex CominLabs)
- Camila Canellas (Ingénieur Pédagogique, financed by the Région Pays de la Loire)

Outputs

We underline here the main outputs of the project in terms of software, publications and resources.

Platforms

COCONOTES [COCoNotes](#) is a platform for enriched and annotable video publications. It features video enrichment possibilities (through the synchronization of slides as images and text, as well as the definition of in-video quizzes), video annotation by users, annotation sharing at different levels (group/public) and analytics dashboards.

COCONOTES LIVE [COCoNotes Live](#) is a live annotation tool, through a private microblogging interface with the possibility to categorize posts. It is aimed at producing annotations that can afterwards be integrated in the COCoNotes platform.

Enriched video resources

A number of video resources have been enriched with slides and video annotation feature. Some of them have been filmed by the project, others come from different sources (videojournal, various events). The platform offers today 69 videos (40 hours) enriched with synchronized slides, quizzes, annotations, featuring courses in different domains (computer science, astrophysics, medicine...) as well as research seminars (such as those organized by LINA).

To carry out the capture of these videos, a cession of rights contract has been elaborated in collaboration with the legal department of University of Nantes, including open-content licensing options. Beyond the project, the produced contract model has been adopted by the University of Nantes.

Source code

We are using and participating in the development of the [Metadataplayer](#) framework as a frontend component. The source code of our [live annotation tool](#) and of the [COCoNotes platform](#) is available on github with an open-source license.

Publications

We have produced scientific articles related to the project principles and results from our experiments.

- Annotations, a key asset for video-based e-learning. [Internet of Education](#), Ljubljana, nov. 2013
- Leveraging video annotations in video-based e-learning. [CSEDU 2014](#), Barcelona, apr. 2014
- Annotating Video with Open Educational Resources in a Flipped Classroom Scenario. [OCWC 2014](#), Ljubljana, Apr. 2014
- Teacher's Time is Valuable. [Open Education Global](#), Banff, Apr. 2015

- The Paper or the Video: Why Choose? [Semantics, Analytics, Visualisation: Enhancing Scholarly Data Workshop](#), Florence, May 2015
- Prise de note collaborative en vue d'une tâche : une étude exploratoire avec COCoNotes Live. [EIAH 2015](#), Agadir, Jun. 2015

Experiments

We conducted multiple experiments to validate ideas and prototypes. These experiments produced results in terms of feedback on the pedagogical relevance of video annotation, as well as insights for the specification and evolution of the COCoNotes platform. These experiments include:

- [MOOC @ddict](#), a MOOC where we tested our live annotation tool and the publication of enriched videos on 7 webinars organised during the MOOC.
- [Explornova](#), a collaboration carried out multiple times with Vincent Minier from Explornova, on astrophysics course. We tested live annotation, video quizzes and flipped classroom scenarios.
- [VideoJournal](#), a collaboration with VideoLectures, to augment the publication of a VideoJournal (video companion for proceedings) with annotation capabilities.
- [CNRS summerschool](#), where we tested our live annotation tool and the visualisation platform to experiment with the scenarized seminar emergence.
- [Flipped classroom](#) has been experimented on a small scale (60 students).
- **Medicine experiment** is a larger scale flipped classroom experiment that is being conducted (from september to november 2016) with 240 students in medicine studies.

Animation

Organization of events

We organized some events, about the Open Education approach and about the usage of technology in education.

- Ljubljana OCWC Global, Ljubljana, 23-25/04/2014
- Journée des MOOCs, Nantes, 24/01/2014
- Colloque "Internet et éducation", Journées Scientifiques de l'Université de Nantes, 12/06/2015

Talks given

The project was presented at a number of events.

- Internet of Education (Ljubljana, 2013)
- Online Educa (Berlin, 2013)
- International Conference on MultiMedia Modeling (Dublin, 2014)
- Conference on Computer Supported Education (Barcelona, 2014)
- Spring Workshop on Mining and Learning (Oostende, 2014)
- OpenCourseWareConference (Ljubljana, 2014)
- Journée pédagogique de la SIF (Paris, 2014)
- Research Seminar (Caen, 2015)
- SAVE-SD Workshop (Florence, 2015)
- Open Education Global Conference (Banff, 2015)
- Environnements Informatiques pour l'Apprentissage Humain (Agadir, 2015)
- COMPSAC Symposium on Computer Education and Learning Technologies (Taichung, 2015)
- Action Lab OEC Global (Cracovie, 2016)
- iAnnotate (Berlin, 2016)
- EC-TEL (Lyon, 2016)
- SupApp day (Rennes, 2016)
- Journée évolution des pratiques pédagogiques - collège formation du RFI Atlanstic 2020 (Nantes, 2016)

Collaborations

- Videolectures.net
- Knowledge4All
- Explornova
- Ouest Medialab
- Unires
- CIRM / UEB
- UTICE / UBL
- OpenHypervideo project
- Hubble ANR project
- CANOPE

Partnerships, follow-up projects accepted

- **Classcode** : The goal is to conceive, produce and deploy over the entire French territory a massive open blended learning course intended for the education professionals and more generally for anyone interested in teaching Computational Thinking to young people (8-14 years old). This project (<http://classcode.fr>) is supported by many French institutions.
- **PASTEL** : Performing Automated Speech Transcription for Enhancing Learning. This project, involving labs from UBL (LIUM, LINA, CREN) and Orange, aims at enhancing the live learning experience by providing live automated speech transcription.