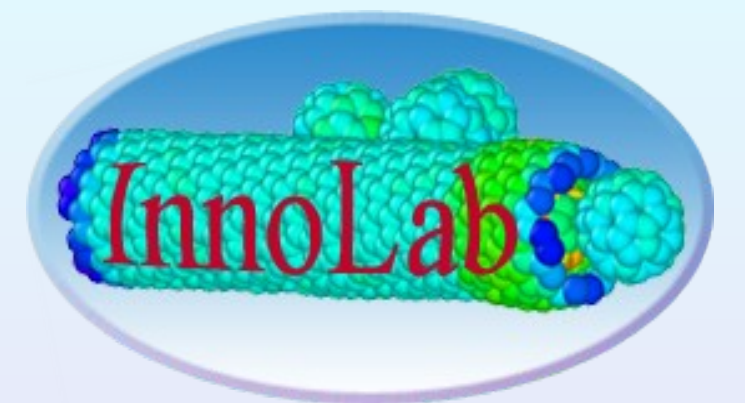


Linking Social Networks to Collaborative tools and task managing software in the cloud for research guidance in Engineering.

INNO-LAB

Grupo de Innovación Docente de la Universidad de Burgos INNO-LAB
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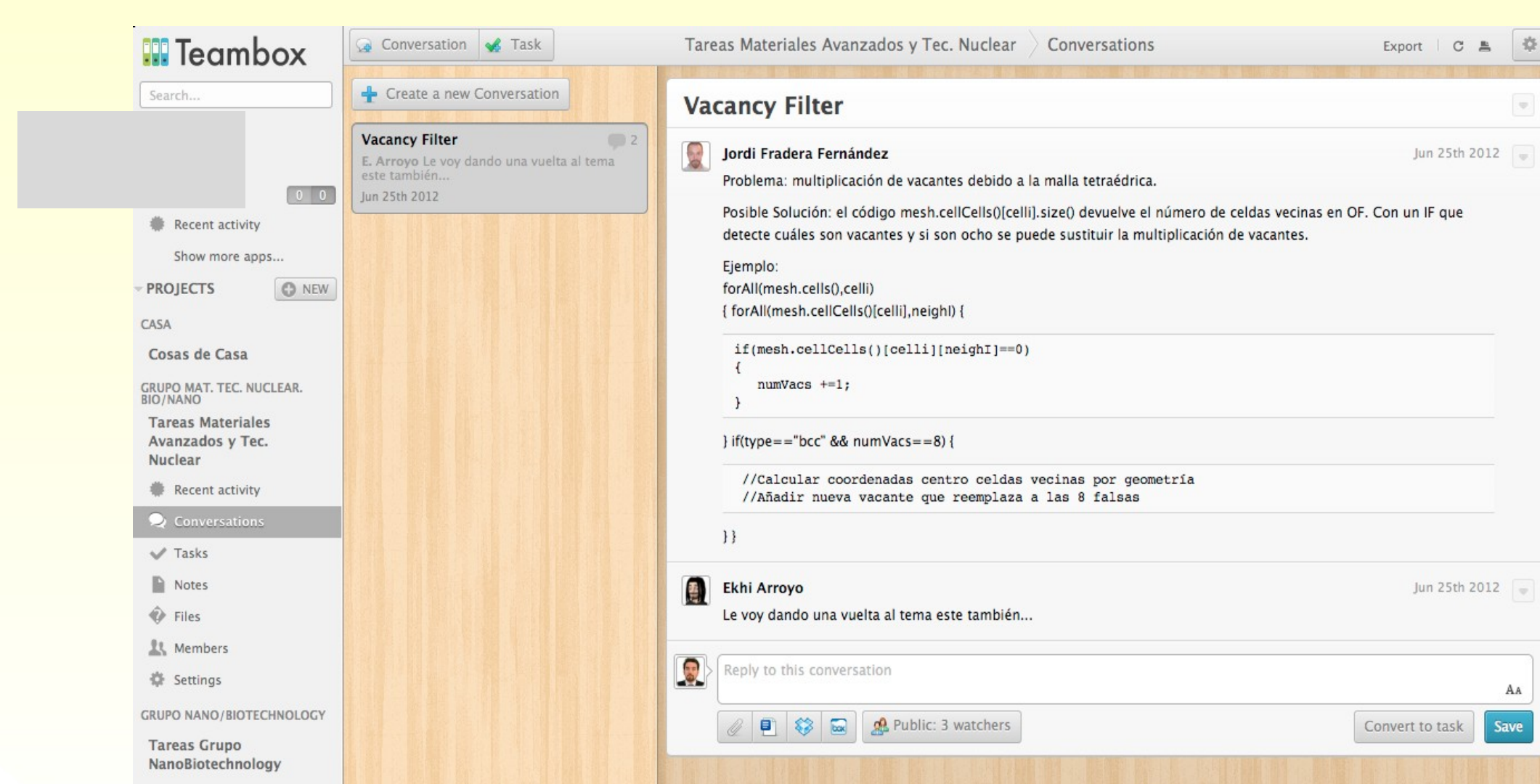
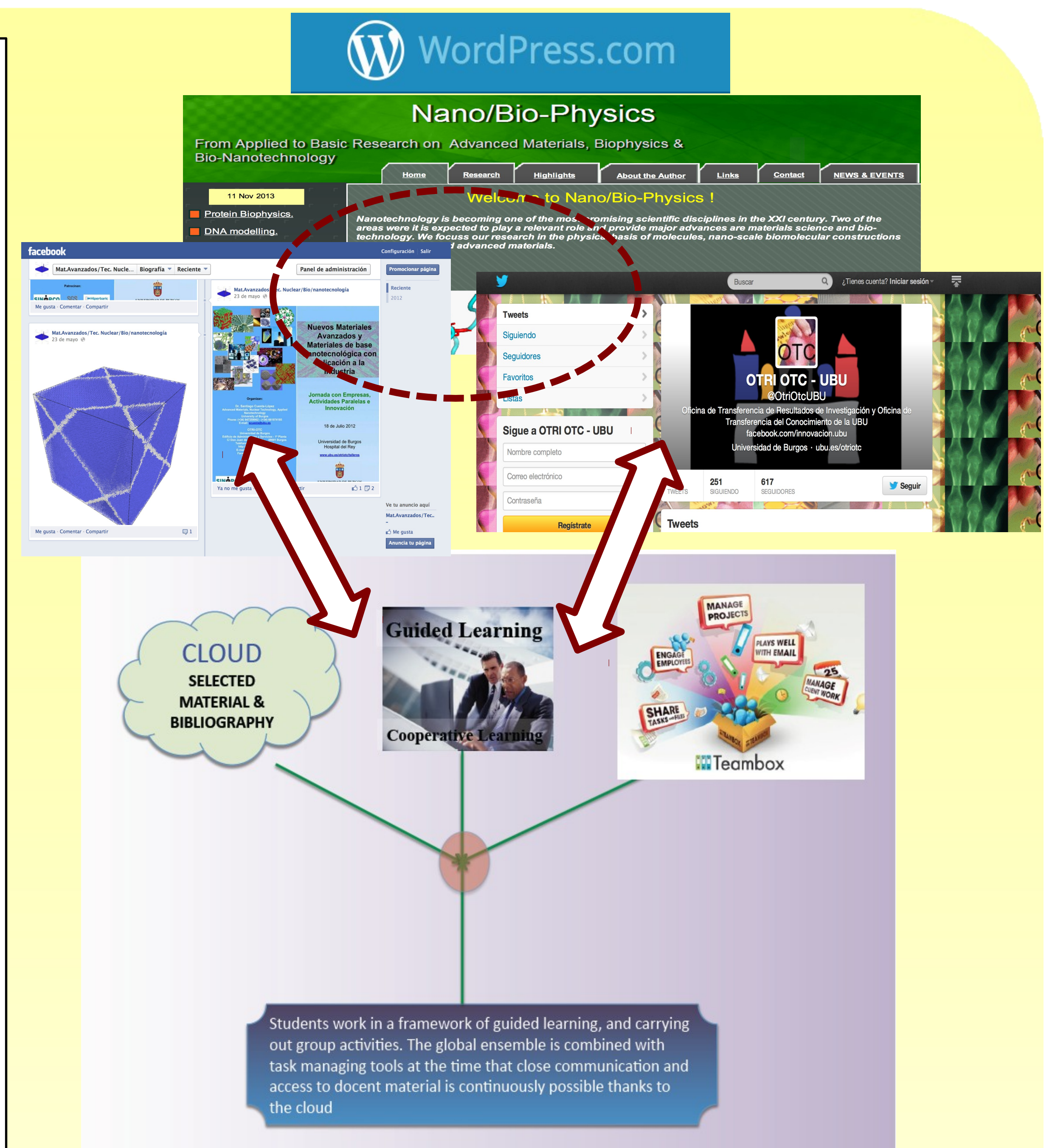


Academic Framework: Methodology applied in the supervision and guidance of Master and PhD courses in Engineering

METHODOLOGY

We have combined and linked the following tools:

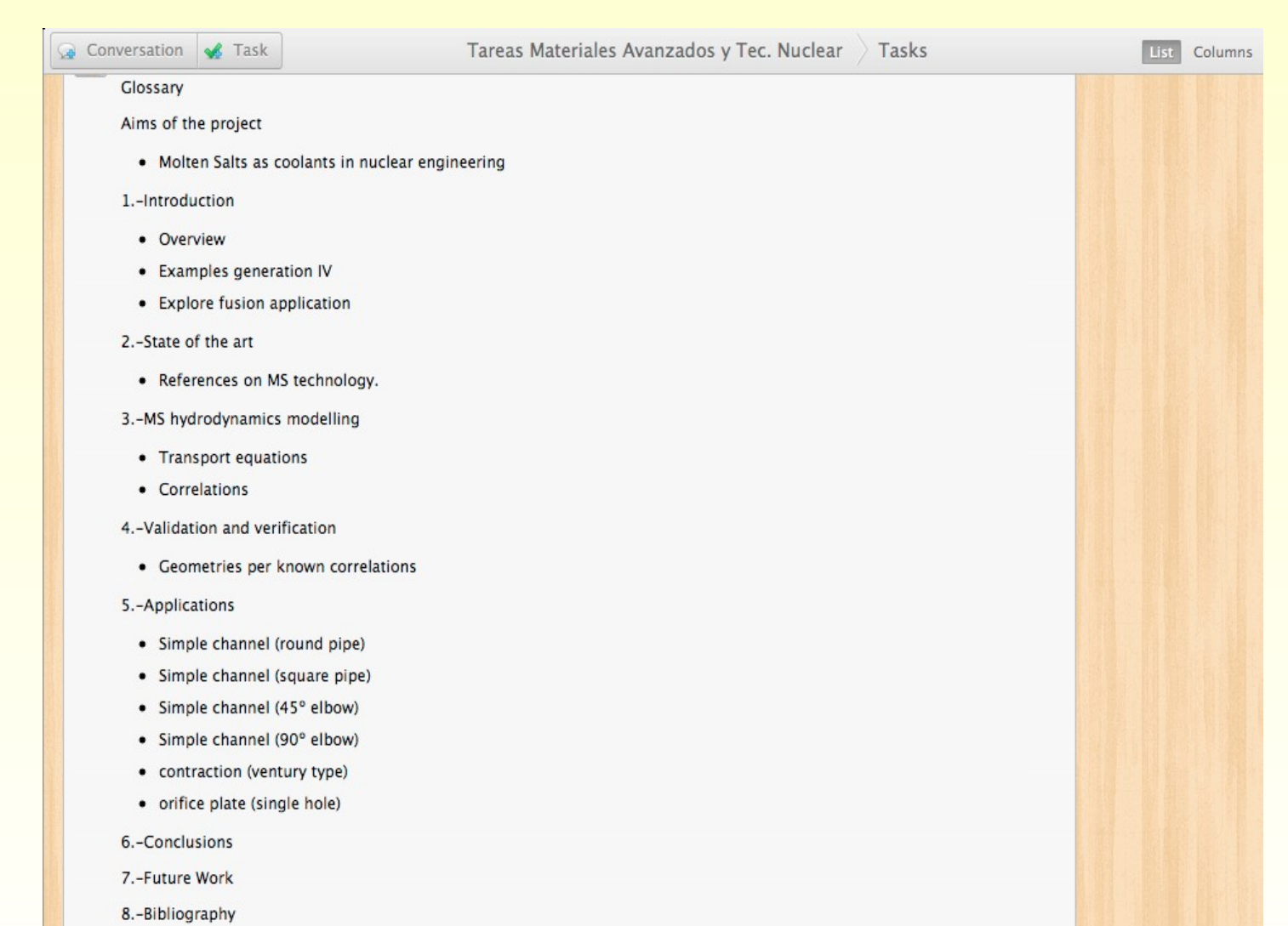
- A blog designed to contain the main topics in the research area where the students are beginning to be immersed; Goals and objectives; Summary of activities prepared for evaluation as homework. The blog is linked and used to update social networks.
- Social networks (Twitter and Facebook) to connect the students to the main research institutions carrying out research in a particular field, and more importantly, to the main EU-FP7 projects that represent the forefront of technological progress.
- A collaborative repository in the cloud, containing bibliography, references, lectures presentations and all the material needed for both the activities performed during the class, and the activities prepared for evaluation as homework.
- A Task managing software in the cloud, that allows task definition, completeness status, following Task progress, and a system to communicate between the student and the tutor (email and chat). In addition, the responsible of the activity can assign observers for every task, so students can evaluate and learn from the progress of other mates.



Cloud discussions about learning/technical concepts are possible between students and supervisors.

This concept innovates three aspects:

- **Continuous access to the concepts.**
- **Improves interaction between students and/or teacher.**
- **Students face a problem in a more difficult scenario of debate.**



RESULTS

- The fact of providing to the students clear concepts depicted into tasks, seem to improve their level of comprehension, and what is more important, they organization skills.
- The collaborative software used, allows that the work that is suggested to the students can be provided organized into different levels of priority. This advantage is encouraging for the students; they manifest an increment in motivation, since they can really follow their progress along the different projects and exercises related to the concepts exposed during the lectures.
- Relating their work to the main actors in the EU research arena, and being up to date with the last technological advances, leads the students to manifest an increment in motivation.

CONCLUSIONS

- ** Our methodology has showed a great improvement in the effectiveness of transferring concepts linked to exercises organized into tasks.**
- ** Students showed better results on average, in comparison to traditional guidance.**
- ** Students feel comfortable with social-network like tools. They interact more frequently and efficiently.**
- ** The proposed guidance methodology showed a satisfactory level of motivation in the students, suggestion a new line of educational innovation through this kind of collaborative cloud environments.**