

## **Pre-conferences ESERA 2011**



### Pre-conference Collaborative Research with Teachers in Science Education

September 5 th - 9th 2011 (10.00 -12.00 AM) Institut français de l'Éducation (IFÉ) - ENS de Lyon 19, allée de Fontenay - 69007 Lyon

# • Addressing the Complexity of the Educational Setting with Collaborative Research A Case Study about Game-Based Learning

#### E. Sanchez & C. Jouneau-Sion – EducTice- IFÉ - ENS Lyon

During the last few years our team has been involved in research into the use of games for secondary education. Researchers and practicing teachers collaborate to address the complexity of educational settings focused on a Game-Based Learning approach. Our research methodology is a design-based process aiming at refining both theory and practice regarding the design of games and its impact on learning outcomes.

Our presentation will focus on the description of the research methodology. It will also offer the opportunity to discuss the benefits and limitations associated with this methodology.

• Collaborative settings and design focus: an agenda for authentic and pragmatic science education research

#### D. Couso - Dept. Didàctica de les Matemàtiques i les Ciències- Facultat d'Educació Universitat Autònoma de Barcelona

In the last decades there has been an increasing interest on *design* as a privileged perspective for science education research. Authenticity and pragmatism, both regarding research and change efforts, have been claimed as main reasons behind this new (in fact revisited) research focus. However, much research in the field seem to assume a fundamental separation between design and implementation processes, which take place with certain isolation from each other at university and school, respectively. This situation contrast with the increasing amount of research that during the last decades has shown the importance of teachers' active participation in innovation in science education, signalling school-university collaborative scenarios as the most adequate settings for teachers' empowerment, development and thus educational change. In this sense, a new agenda for science education research where collaborative scenarios are established with a *design* focus can enrich both approaches, allowing a major degree of local adaptation and fitness to purpose of both research and change efforts. This will mean to develop further on the idea of authenticity and pragmatism by promoting high quality research that aims at a certain sustainability of the initiated change processes.

• Research in education and for education in collaboration with teachers

#### Maryline Coquidé - STEF - IFÉ - ENS Lyon

A summary of the main points of the pre-conference "Research with teachers" and our reflections on collaboration between researchers and teachers at the French Institute of Education (formerly the Institut National de Recherche Pedagogique). These collaborative projects involve a network of around 700 teachers and researchers in France.

This research is conducted "with" teachers instead of "on" teachers (Desgagné and Bednarz, on 2005). This collaboration leads to new scientific problems and generates innovative shared projects. It is also indispensable in the elaboration of relevant, well adapted and useful resources by and for the actors in education. Such collaboration allows the production of knowledge that would otherwise be impossible and facilitates the circulation of this knowledge in teacher-training and more widely among the teaching community.