



Dear readers of the mascil newsletter,

The latest **science education report** (*Science Education for Responsible Citizenship*, European Commission 2015) drafted by experts for the European Commission outlines some very important insights and recommendations for STEM education in Europe. It calls for STEM education to focus on competences and **'learning through science'** as opposed to 'learning of science' and acknowledges the **role of inquiry** approaches in this respect. Experts also see it as vital to work towards **'closing the gap** between what we have learned from **science education research and classroom practice'**. This underpins the relevance of not only looking for collaboration models suited to transferring existing research knowledge *into* practice, but also of research and practice working *together* in order to build the science education that we want to see in our society's schools. Understood this way, transfer is not a one-way street from research to practice.

The report on science education for responsible citizenship continues to place emphasis on a focus that we have seen in education policies of the past years: the attention placed upon **quality** in teacher education, spanning pre-service education, induction and in particular, continuous **teacher professional development** (PD). In this respect the report also raises important questions on how to ensure, measure and evaluate quality in teacher professional development. In order to advance exchanges on improving the quality of teacher professional development, the report also calls for a **European-wide exchange of knowledge, expertise and approaches** through networks of science teacher educators and stakeholders in science education.

We are therefore proud that **mascil contributes to advancing science education in Europe** in line with the latest recommendations of the European Commission. In fact, we have been doing so for more than three years now – and with great success. In this and the following newsletter we would like to focus on some of our activities and offers that quite directly put the latest science education report recommendations into practice.

Your mascil team

MASCIL'S CONTRIBUTIONS TO SCIENCE EDUCATION IN EUROPE

mascil is designed to promote the broad **uptake of inquiry-based learning**. In doing so, we strive to link **research-based science education approaches** with classroom practices and school realities so as to **make them work in practice**. To reach this goal, we also offer **teacher professional development in 14 European countries** (check offers in your country [here](#)). We have also built a **European research-practice-policy network** in recent years at the University of Education Freiburg (mascil coordination) in order to promote the international exchange on innovation in STEM education (read more on networking activities [here](#)).

CONFERENCE ON SCALING-UP TEACHER PROFESSIONAL DEVELOPMENT

European reports outline that improving the quality of teacher professional development through research-practice collaboration is expedient. Responding to this need, we established the conference series *Educating the Educators* as part of our mascil project activities. In 2014, the first conference bridged the research-practice gap and focused on exchange of scaling-up approaches in maths and science education to promote teacher professional development (information and conference proceedings can be found [here](#)).

The **second *Educating the Educators* conference** will be held **7-8 November, 2016 in Freiburg (Germany)** and like the first conference, is being organized in cooperation with the DZLM (nation-wide German centre providing teacher training in mathematics). The conference will be at the core of mascil's final project event and provide a platform for exchange focusing on **research, policy and practice implications of scaling-up teacher professional development**.

Conference features include expert input from high-level **keynote** speakers (Olaf Köller, Alan Schoenfeld, Malcolm Swan) and **researcher and practitioner presentations**. Specifically designed **research-practice sessions** will provide both research and practice perspectives while highlighting important topics, such as the usability of internationally developed classroom and professional development and classroom materials. In addition, a **Materials Market** with a particular focus on professional development materials will be of particular relevance to the audience. Early career researchers are specifically invited to participate in the **Early Career Researcher's Day** that will be held on 9 November, 2016. We are also specifically looking forward to a meeting of the new and evolving practice **network of European STEM Professional Development Centres** which was, in fact, initiated as a result of the first ETE conference.

Submissions for paper and poster presentations (based on research or practice) on the topic of the conference (scaling-up teacher professional development in maths and science education) are still being accepted until **16 April, 2016**. Offers to exhibit suitable materials for the Materials Market can also be submitted until this date. The call for proposals and all details can be found on the [conference website](#).

POLICY SEMINAR ON SCALING-UP STEM TEACHER PROFESSIONAL DEVELOPMENT

mascil is inviting policy makers to discuss ways forward to scale-up STEM teacher professional development in a **European policy seminar**. The seminar will be part of our final mascil conference and is to be held on **8 November, 2016** in Freiburg (Germany). We will present the latest research on teacher professional development and its scale-up, discuss recent trends and innovations in Europe with policy makers and propose action to overcome challenges. The seminar's workshop format will ensure that every participant will leave the seminar with **concrete ideas on improving STEM teacher education and professional development at the local or European level**.

We are currently collecting further input from across Europe for the seminar and **invite researchers, practitioners and policy makers to tell us their needs, opinion and ideas** by participating in a short survey. The deadline for participation is **22 April, 2016**. Visit our [website](#) to access the survey.

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