

## WP 3: Paper on national implementation to enrich discussion in national workshops

### Introduction

As laid down in the Description of the action, Martin Lindner (WP 3 lead) will initiate the work in national workgroups and bring all national workgroups together in the second conference of INSTEM in Halle in March 2014. Policy makers, key-actors, project coordinators, teacher educators and teachers – as involved in the national work groups – will contribute to INSTEM dissemination.

In order to achieve that objective it is necessary to organize a workshop on a national/regional level in each partnership country prior to this conference. To initiate the national processes you need to bring together participants from different backgrounds (see also below). For this purpose, it might be helpful to combine your national workshop with other events. On the level of contents, you need to bring together the knowledge of different EU-projects and give it to the national workgroups. Please discuss how the results and experiences of prior projects could be made available to the respective target groups.

Additionally there should be a short national report to inform the WP leader about the workshop outcomes. There will be also virtual meetings of representatives of national workgroups (Jan.-March 2014). To establish transnational cooperation, there will be bi-/tri-national virtual meetings which allow participants to profit from different perspectives and to exchange ideas on implementation.

### Actions required:

- Prepare and conduct a national workshop
- Prepare a report on this national workshop
- Invite 5 persons for the 2nd conference
- Prepare virtual meetings of representatives of national workgroups

### Whom to invite?

The aim of this paper is to initiate discussion on the work of the national groups on how to inform key-actors of the project results and materials and to use them in practice. It will encourage national working groups to reflect on possible exploitation strat-

egies, as a starting point for discussion.

INSTEM will offer different information on prior projects:

- Information on project materials available (classroom materials, professional development materials and background information)
- Information on a meta-level (“what have we learnt?”) – condensed into recommendations (see Report of WP 5 and part of the Report of WP 2)

This information is valuable for different target groups. Whilst an overview on materials is more relevant to teachers and teacher educators, the information on a meta-level is more relevant for school authorities, policy makers and partners from upcoming projects. For this reason the participants of the workshops have to be selected carefully and their needs have to be taken into account.

Participants, who might be interested in information on a meta-level and background materials:

- School authorities
- Funds or funding organizations
- Policy makers on regional / national and international level

Participants, who might be interested in classroom materials and professional development materials:

- Teachers
- Teacher educators
- School authorities
- Teachers’ associations
- Publishers of textbooks

When you start inviting people for your national working group, the following practical hints might be helpful:

- Influential persons are not attracted by long term invitation, but by interesting questions. So it might be possible to invite these persons short term.
- It is not necessary (and of course not possible) to invite all stakeholders or even persons from all relevant organizations. Usually these persons know each other or at least know the strategies, the results and also crucial points of the national/regional STEM activities. This means, a few persons could give sufficient information on the process. Our information will spread easily in the existing networks.
- As all networks, STEM-networks have “hubs”, persons or organisations with a lot of information, with close insight into the crucial processes going on in a region, a nation, or in outstanding companies. It would be helpful, to identify these hubs (either persons or organizations) and involve them into the process.
- Be flexible in your strategy. If you cannot reach the most important people, ask

them to send a substitute or any person being able to inform you at the conference and take the information along from there. Sometimes these persons are even more influential, because they are closer involved into the practical work.

### **How to prepare the workshop?**

To raise the interest of the participants and to involve them in fruitful discussions it is helpful to know about their activities and their needs. Depending on the target groups there are different possibilities to identify these characteristics.

Teachers / Teacher educators:

- Collect teachers feedback from the classroom: what worked/did not worked?
- Collect teachers / students feedback: What do they think about inquiry?
- Talk to teacher educators prior to the meeting: What do they need?

Policy makers / Organisations / School authorities/Publishers

You could search their websites to find out answers in relation to the following questions:

- What activities do they work on?
- What are their special concerns in relation to science education?
- What are their special interests?

### **How to stimulate the discussion during the meeting?**

The meeting might start with a brief introduction on INSTEM and its activities. Then you may wish to give a brief overview about the information on prior projects INSTEM offers. The core of the meeting however, should be a fruitful discussion, on how the results and experiences of prior projects could be made available to the respective target groups. We have to bear in mind that there have been numerous projects offering teachers materials and professional development. Experiences shows that teachers and policy makers tend to get lost in the huge amount of information, activities and materials. Because many project activities follow one another people tend to not take them serious. For this reason the following questions might be useful to stimulate the discussion:

In relation to the materials and activities:

- How can we on a national level avoid the confusion on all the projects?
- How can the outcomes from international projects communicated in an attractive way?
- How can we disseminate project activities, materials and results in a way that teachers and stakeholders use them?
- What information would teachers need to make projects attractive to them?

- Where do teachers look for information?
- What are appropriate means of dissemination?

In relation to meta-information:

- How can we disseminate meta-knowledge as described in the report of WP 5 and 2?
- How could the outcomes from projects have an effect on national policies?
- What possibilities are there to use the meta-knowledge?
- How can projects and school administration / policy makers work more closely together?
- How can we build up permanent networks of stakeholders in relation to school?

### **Case study**

According to the Guidelines of the “Detailed description of the project” each partnership country has to write a case study on how the project knowledge is exploited in its country (description, analysis of effects, focusing on the national impact and the potential for the basis for replicability to other country/regions). These case studies will be collected and collated by the WP5 leader.

Mostly we are concerned with the question of how to tap the full potential of project knowledge. Please plan to conduct a comprehensive discussion of this issue during your national work shop. Because the case study, which is due in month 30, is based on this discussion. The 30 month timeframe for the case study means specific results are expected in May 2015. This also implies that the case study involves a process. Every case study must therefore include information on what was decided in the national work groups and how it was implemented. Please make sure to give an account on how you decided that results and experiences of prior projects could be made available to respective target groups and how it was implemented in your country.