

STEM PD Net: it's time for STEM PD centres to step up and be active in the processes of change

April 25-27th STEM PD Net project partners had a meeting in Vilnius. The objective: to review project progress, share experiences in project activities implementation, present and discuss intellectual output. During the meeting, a lot of attention was given to policy briefings being developed by Linköping University (Sweden). The author of these briefings – Dr. Claes Klasander presented 2 already developed policy briefings and planned the content for the 3rd one. In this interview, we are talking to the Swedish project partner Dr. Claes Klasander (Centre for School Technology Education, CETIS, at Linköping University) and STEM PD Net project manager Elena Schafer (project coordinating institution: International Centre for STEM Education, ICSE, at University of Education Freiburg) about aims, topics, and main insights of these policy briefings.

Why you've decided to develop policy briefings in this project?



Elena: The European STEM PD NET acknowledges the importance of collaboration between policy makers and professional development centres, in order to improve education in the STEM area. These key actors need to communicate and cooperate in order to overcome the challenges in providing high quality professional development and support teachers in delivering high-quality STEM education for all students. STEM PD Net contributes information to policy makers through the development of a set of policy briefings in order to establish and strengthen cooperation with policy makers.



Claes: STEM PD is very important. I think we need to find ways how to address policy makers and show them benefits of supporting good STEM PD. Often teacher educators are not used to negotiate with policy makers. Our project can help with this.

But policy makers receive briefings, summaries, infographics and other documents from various organizations. What is peculiar about these briefings?

Claes: I would not say anything is peculiar. Every organization wants to have policy makers' attention for their cause. In line with that also STEM PD Centres need to present information and good arguments to policy makers for being innovative in new ways of both enhancing existing STEM PD and taking initiatives for developing new. Cooperation is a key word if we want to define the uniqueness of our policy briefings.

Elena: Another key factor can be seen in the topic itself. Teacher Professional Development in STEM education in many countries is a rarely tackled field. The policy briefings are related to the overall aim of giving PD centres a voice. Giving a voice means STEM PD Net communication with the policy levels on regional, national as well as European policy levels. All policy briefings are available in an international English version as well as in the partners' languages, adapted to the national circumstances in the respective countries.

Three policy briefings in total – each focus on specific topic or problem. Maybe you could elaborate a bit, what topics are covered/problems addressed in briefings? Why you've decided to choose these particular topics/problems? There are so many angles to look at STEM PD...

Claes: The first policy making briefing focuses on presenting STEM PD and especially the STEM PD Net project to policy makers. Raising the awareness for STEM PD is the first important step. Therefore, each country adapted and translated this first briefing to their own contexts and

language. In this briefing, we elaborate a little about the three arenas that together form this landscape – the Formulation Arena, The Transformation Arena and the Realisation Arena – each one with their own groups of Policy Makers, Stakeholders and actors. The idea is that our participating countries also can learn from each other.

The second briefing is more complicated. It is about different models for how to set up STEM PD Centres. Here we have used the three arenas again with the ambitions to inform Policy Makers on alternative ways of affiliating a STEM PD Centre to e.g. a Ministry of Education, a university or a regional body. From this stance we also discuss how a STEM PD Centre can have different levels of autonomy. Here the focus is “change”. If policy makers want to achieve stronger HQ STEM PD then this briefing wants to support them with some dimensions on how to analyse a present situation in relation to a desired situation. This briefing will inspire with examples from other PD centres and organizations across Europe.

The third policy briefing will deal with implementation of PD in the STEM area and how quality in PD initiatives can be assured and measured.

STEM PD Centres and their activities appear to be the centrepiece of these briefings. How centres could effectively use insights from the briefings?

Claes: The briefings are thought to be important support to STEM PD Centres communication with different Policy Makers on the three arenas. We have already learned a lot from each other. Now we need to step up and be active in the processes of change together with actors on the three arenas. Hopefully, some of the actors on the three arenas will come up with initiatives and contact the STEM PD Net partners to start collaborations concerning STEM PD.

Elena: In my opinion, policy briefings could benefit new STEM PD centres (which are currently developed or will be set up in the future in countries where they are not existent now). They could use them to build up cooperation with policy makers.

What you consider the most important insights in two briefings you’ve already published?

Claes: On a personal level, it is a better understanding of how diverse the PD and educational landscapes are across Europe. On a STEM PD Net Project-level, it is the importance of formulating a STEM philosophy and a vision for future changes towards higher quality STEM PD. This is necessary in order to address Policy Makers with strong arguments for improved cooperation aiming at strengthening STEM PD.

Maybe there is something else you’d like readers of this interview to pay attention to?

Claes: I think it would be interesting if readers of this started discussions on “What does STEM and STEM PD mean to us?” and “What makes STEM education and STEM PD unique?”

In the STEM PD Net project, I represent the Swedish National PD Centre for School Technology Education. The school subject Technology concerns knowledge about the human relation to “The Made World” and puts it in a school setting. There are many opportunities to support pupils’ and students’ knowledge growth towards a holistic worldview, if you engage them in activities, where the STEM subjects together can contribute to a better understanding of how artefacts or technological systems are constructed. How they have changed over time and what consequences it has for the individual human, the societies and the natural environment. As until now, I think the technological aspects of STEM are underestimated.

Interview has been made by **Rūta Mazgelytė**,
Lithuanian partner from the Education Development Centre

Policy briefings:

First briefing: [Introducing STEM PD Net to Policy Makers](#)

Second briefing: [STEM PD Centre models](#)