Interview with Kim Schildkamp and colleagues - University of Twente, the Netherlands

Winner of the 4th Research and Practice Project Award 2015

The data team procedure for professionaldevelopment and school improvement

Kim Schildkamp and colleagues with their award

1. **Can you please tell the EAPRIL community something more about yourself and your research background?**

Our team consists of different members with different backgrounds and expertise. Kim Schildkamp and Cindy Poortman are the project leaders. They both have backgrounds in the field of educational research. Kim's work focusses on supporting schools in the use of data for school improvement. Cindy's work focusses on professional development of teachers in teams. The team also consists of data team coaches, such as Hanadie Leusink. They support schools in working according to the eight steps of the data team procedure. Furthermore, several PhD students (Johanna Ebbeler, Mireille Hubers, Wilma Kippers, Erik Bolhuis, and Gert Gelderblom) and a postdoc (Rilana Prenger) study the (effects of) data teams in schools. We also work together with the Ministry of Education and several school boards, such as Stichting Carmelcollege, Vivente, and Veldvest in the Netherlands. Internationally, we work together with several municipalities (e.g., Nacka), with the Skåne Association of Local Authorities, the University of Gothenburg (with Ulf Blossing) in Sweden, and with the University of Southampton (with Chris Downey) in England. But our most important partners are the schools, and especially the school leaders and teachers participating in the data teams, in Luxembourg represented by Christel Wolterinck from Marianum.

2. **Can you please tell the EAPRIL community something more about your awarded project?**

The use of data can lead to school improvement. However, most schools need support in the use of data. To support teachers in using data effectively, we developed the "the data team procedure". Data teams consist of a data expert,

4-6 teachers and 1-2 school leaders. They collaboratively learn how to use data to solve an educational problem within the school, using a systematic approach. The data team procedure is an iterative and cyclic procedure consisting of eight steps (problem definition, possible causes for the problem, data collection, data quality check, data analysis, conclusion, actions to solve the problem, and evaluation). The data team members are trained in the data team procedure by a coach for two years. The coach visits the data team's school every month for a meeting and facilitates working according to the systematic procedure. Teams also participate in two data analysis workshops for more specific support. Data teams are a form of professional development for teachers, with the ultimate goal of improving school quality.

The data team procedure was piloted in four schools in 2009. Based on the success of the pilot more schools became interested. We have worked together with more than 70 schools, and several coaches, national and local policy makers, and researchers in three different countries (The Netherlands, England, and Sweden) to further implement, study and improve the procedure. Research results show that the data team procedure can lead to professional development (e.g., increased data literacy) and school improvement (e.g., increased student achievement).

3. What was your motivation to apply for the Best Research and Practice Project Award?

We think it is very important to share the knowledge we have developed over the years with regard to data use and data teams. We have been conducting research in schools, but have also been actively working together with practitioners in the use of data. We have been doing this work since 2009 and have been able to make tremendous progress in supporting schools in data use. As stated by participating practitioners: "data use has become the way we do things around here", "we have developed new insights and have become more skilled in data use" , "we have a better view on the impact of our own teaching", and "this is a great way of working together".

This is a great result. We initially thought that the data team procedure did not work, because after one year of working with the four data teams from the pilot, none of the teams had been able to solve their problem. However, all the data team members indicated that they found the way of working so valuable and that they had learned so much, but that they felt they needed one more year of support, which we provided. These schools started communicating to other schools about their work, which resulted in a cooperation with a large school board, who wanted all their schools trained in the data team procedure. Next, also the Ministry of education got involved and made it possible to support more schools. After this, more and more schools followed, and we implemented and studied the data team procedure also in primary and higher education. Moreover, schools, universities, and municipalities from Sweden and England got excited about our work and also got involved. Our project expanded bottom-up from four schools in one country to more than 70 schools in different countries, and from

one researcher to more than 15 researchers and coaches, and we are still growing.

We think our project is a great example of how practitioners, researchers and policy makers can work together on one common goal: improve education for all students. And we have evidence that this can work: several of our data teams have been able to solve their educational problem and improve the learning of their students! This is what we wanted to share with the EAPRIL community.

4. Why did you feel that your project made a good chance to win the Best Research and Practice Project Award?

- It is a project were researchers and practitioners work with and learn from each other. In fact, the practitioners are also researchers. The data team members conduct a type of practitioner research in their own school. They investigate an educational problem in their own school (they choose the problem they want to work on) by using the data team procedure. Also, they investigate their own effectiveness. Furthermore, researchers, together with practitioners, study the functioning and effects of the data team procedure.

- The project responds to a real need in the field: the use of data to improve teaching and student learning in schools. The impact of the project in the field has been extensive. Research results show that the data team procedure can be effective in answering the need in the field regarding improved knowledge and skills of teachers, but also in terms of improving student achievement regarding the problems schools worked on using the data team procedure. Examples of higher student achievement that schools realized after working with the data team procedure are significantly increased exam results for English and increased mathematics achievement in the first year of secondary education.

- In the project the power of networks is demonstrated: Firstly, the data team members within schools form an important network, learning how to use data to solve educational problems in their school. Secondly, we established networks consisting of data team members across schools. We organize yearly network meetings for data teams, where data teams share their progress and what they have learned. Thirdly, the researchers, school boards, and policy makers form a network in which we regularly discuss (in sub networks), for example, the progress of the data teams, the promoting and hindering factors, and the effects. We discuss what is needed to make the project a success at both the local (school board and municipality) level as well as the national (Government) level.

- Our work is sustainable: We support schools for a period of two years, after which we expect them to continue to use data independently. Our (preliminary) research results show that several schools continued to use data after the support period had ended. The results of our studies indicate that the data team procedure seems to be effective in two different manners (1) actually solving certain problems within the school and thereby improving education and (2) educating teachers and school leaders in how to use data to

improve education (e.g., a form of professional development), and therefore making this procedure sustainable over time. These educators have learned to use data, and can apply these knowledge and skills to different topics and problems.

Consequently, fulfilling the combination of criteria rather than just one or two, has made the difference we think.

5. **How has the EAPRIL Research and Practice Project Award and/or the experience of competing for this award (i.e. presenting your application at the conference in several timeslots?) helped you and your research activities as a researcher?**

It is a great way of knowledge sharing. It helped to increase the visibility of our work, and increased our network. We were able to present our work several times, which led to great visibility. For example, every coffee break people who were interested in our work approached us, and we were able to discuss our findings and share knowledge. Now, even after the conference, we still get a lot of messages of people who are inquiring into our work.

6. **Why would you recommend the EAPRIL Conference to your colleagues?**

Yes, it is a great chance to meet and interact with people who have a common interest in improving education. Moreover, what I really like about EAPRIL is that it is a place for researchers and practitioners to get together and share their knowledge . I truly believe that we can only improve education and student learning if researchers and practitioners work together.

7. **What makes a good practitioner researcher according to you?**

A good practitioner researcher has knowledge on how to conduct research (e.g., what is a good research question, what data can I use, what is the quality of these data), but also has good collaboration skills. Good practitioner researchers work together with other practitioners and researchers to improve the quality of education in schools.

8. **Finally, what would be your advice for the applicants of 2016?**

Firstly, having a great project alone is not enough. Pay attention to researching the effectiveness of the project: How does it work? Under what conditions does it work? What are the effects on, for example teachers and students? Secondly, demonstrate that in your project practitioners and researches have been working closely together to develop, evaluate, and improve the project, and that it has an impact in the field.

Thank you!

Interested in applying for the 2016 Best Research & Practice Project Award?

Visit our Conference Website and download the application form!

Deadline June 1, 2016

Decision nomination, beginning of July, 2016