

## Encouraging Teachers to become Research-active

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### Abstract

In The Netherlands more emphasis is placed on the teacher as professional which also includes more attention for research skills. Though this seems to be a promising development, contemporary practice shows this is quite difficult to implement. This paper discusses a project that was carried out in three schools. Teachers received possibilities for participating in a research trajectory and received support of experts during the course of the trajectory.

The evaluation shows that in general teachers were quite content with their trajectories but the school managers were somewhat more reserved. They made critical remarks concerning the quality of the outcomes and the usability of the research products for the further development of their schools. The experts viewed their role was supportive but could have been more significant if there were more resources for supporting teachers. The paper concludes with some recommendations for further improvement of teachers' research trajectories.

### Introduction

To date it is broadly acknowledged that teaching should involve more than conducting lessons in the classroom in a prescribed manner. Being a genuine professional also implies reflection on one's own teaching, being informed about the latest developments, and contributing actively to increasing the evidence-based nature of teaching practices.

The stronger emphasis on the teacher as a research-active professional can be observed across Europe (European Commission 2005; 2007) and is broadly advocated by politicians, professional bodies, committees, teacher education (OECD, 2005), but far less by teachers themselves.

Though the attention for the notion of the teacher as a research-active professional has been increased the literature suggests that there is far more attention for how to teach student teachers to conduct research than for how to increase the research competences of already qualified teachers. However, the attention for this latter group has been increased substantially, in practice and in research as well. A brief look at the literature shows some fundamental issues regarding the teacher as a research-active professional.

For example, the literature indicates that there are different opinions about what it actually means to be a research-active teacher. Some scholars emphasise that teacher research needs to be a, preferably collaborative, activity that allows teachers to inquire and improve their own practice (see for an example Ermeling, 2010), whereas other views explicitly or implicitly suggest that teachers need to be involved in academic research projects guided by professional researchers and thus restrict the teachers' role to merely a data collection tool (Martens, 2010), with doubtful implications for empowering teachers own teaching practices.

Approaches that are closely linked to the everyday world of teachers are presumably more beneficial for strengthening the relationship between professional development, improving teaching practice and school development, as the examples of professional development schools in the USA suggest. These examples have in common that communities exist in which teachers, teacher students, teacher

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educators, and researchers collaboratively work together (see for example Van Velzen, Bezzina & Lorist, 2009).

Another issue that deserves attention is that the contemporary discourse on the teacher as researcher easily overlooks that teaching and researching require different mind sets. Teaching differs from researching in the organisation and application of knowledge. Where teachers' knowledge about teaching is mainly organised from the learners' perspective and is used as a basis for helping students to understand specific concepts, researchers organise their knowledge in order to allow them to know what facts are already proven and what assumptions and hypotheses need further attention (Kinchin & Hay, 2007). In summary: though the notion of the teacher as researcher may be interesting from a professional point of view, in practice many obstacles and unsolved issues can be observed, which hampers the further development of the notion of the teacher as a research-active professional.

### **Research questions and methodology**

This paper presents the findings of a project<sup>2</sup> that offered secondary school teachers within three secondary schools possibilities to conduct their own research. Teachers were invited to step forward with ideas. All ideas were allowed as long as it contributed to improving teaching practices. Teachers received coaching and support from two external experts from a teaching expertise agency and at the closing of their own research they all wrote a report and presented their findings during a meeting to their colleagues, school managers and a panel of external researchers.

As part of the project an evaluation was scheduled that focussed on how teachers and their school managers experienced this novelty and to collect recommendations for future teachers' research projects.

In total thirteen teachers, individually or in pairs, conducted small research projects. They all received a questionnaire with semi-structured questions allowing them to articulate their research experiences. They were invited to write down their answers and to mail the questionnaire to the researchers. Examples of questions included in the questionnaire were: Would you recommend your colleagues to attend future runs of this research trajectory? Why or why not? What would you like to change in this trajectory and what not? Please provide explanations and reasons to underpin your answer. Do you feel that the outcomes of your research trajectory are applicable in your own daily teaching practice?

In addition, responses of three school managers were received. Two of them were interviewed and the third one gave his reflections in written report. Beforehand they were invited to reflect on the goals, expectations, the course of the trajectory, usability of the outcomes of the trajectory for the further development of the school. Finally, two experts involved in the coaching and evaluation of the teachers' trajectories were invited to reflect on their experiences on the same topics as the school managers.

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<sup>2</sup> In 2008 the Dutch government, the unions and secondary schools signed the covenant *Leerkracht van Nederland* in which agreements were established to offer teachers better prospects in their career in order to counter impending shortages. A group of secondary schools asked the Ruud de Moor Centre of the Open University to design a trajectory to professionalise fully qualified teachers (in Dutch *eerstegraders*) with substantial experience in teaching. The trajectory was carried out in 2009. The participating teachers needed to apply for this trajectory. Admittance was partly based on a portfolio that interesting teachers needed to compose. In total 16 teachers were admitted, 13 of them finished the trajectory.

## Findings teachers

In total 9 out of 13 questionnaires were returned by the teachers.

With regard to the valuation of the research trajectory six participants were positive about the entire trajectory, whereas two participants did not view this trajectory as recommendable for future implementations. Two participants were negative and one participant had mixed feelings and mentioned positive and negative gains at the same time.

It demands loads of time and energy, it results into negative comments of your fellow teachers, there was a lack of cooperation, there was lack of individual support concerning educational theory and research methods, the structure of the trajectory was insufficient and one participant even mentioned that her trajectory resulted into a conflict within their own teaching department.

Learning to conduct research, access to knowledge that supports you to improve your own daily practice as a teacher, more insight into how things are organised in the school, the opportunity to discuss topics with colleagues you usually do not meet, were just a few of the positive outcomes mentioned by the participants.

*“I experienced this trajectory as an instrument to work on a product in a structured manner. The trajectory allows deepening your knowledge of a certain topic. You are forced to dedicate time to this trajectory on a regular basis, next to your daily hectic work as a teacher. It also enriches you as a person.” (participant 5)*

Based on their own experiences the participants recommend the following improvements of their research trajectory that can be summarised into three topics.

The first topic concerns the lack of clarity of the trajectory. Participants mentioned that they felt in the first months of the trajectory it was not clear to them what the criteria were for their final product. Moreover participants mentioned that for them it was not clear how these products would play a role in the further development of their school. School managers did not clearly define what they expected as outcomes and how these products of the research trajectories would be implemented in daily practice.

The second topic concerns the lack of time. Participants received 150 hours, and sometimes even less, to dedicate to their trajectory, but most of them experienced this time as insufficient to achieve their intended results. It was not only the lack of sufficient hours as such but also it appeared to be difficult to combine research with other teaching duties.

The need for more support was the third topic mentioned by the participants. Participants mentioned they felt insufficiently supported by the external experts and also there was a lack of appreciation of their fellow colleagues and the school managers for their research activities.

When participants were asked about the aspects that need to be unaltered in future runs of research trajectories, they most mentioned the freedom to choose a subject of their own. This allows participants to select a research topic that is closely linked to their own interests and daily teaching practice. This freedom also includes the liberty to select one's own research method. Also mentioned was the formal completion of their trajectories that consisted of a plenary meeting of all participants, colleagues and school managers. During this meeting the participants presented their product to this audience and to an external panel of researchers as well. Finally they mentioned the possibilities to contact the external researchers by mail, phone or by face-to-face meeting.

Participants were asked to mention their three main learning outcomes as a result of participating in this trajectory. In summary their learning outcomes can be grouped into three categories: professional, individual, and research. The first one concerns

their professional growth as a teacher. Many participants mentioned that this trajectory supported them to take a critical stance toward their own daily practice and help to consider improvements.

*“Working in a structured manner to solve a particular problem, based on own experiences and observations, increases your own consciousness as well as that of others that encourages change. The fact that you know the problem from your own teaching experiences, allows you to have a better insight into the problem you are researching. The trajectory was a mutual trajectory together with a colleague that enhances collaborative learning resulting into more insights and a richer understanding of the problem. Thus this trajectory also contributed to increasing my competence in working together with colleagues.” (participant 4)*

Also mentioned were learning outcomes that can be regarded as personal growth, for example to learn to better cope with the stress of the daily duties, to improve the capacity to plan your own work, the feeling to become more secure and convinced about your work as a teacher. Though not mentioned by all participants a minority recognized there was a growth in their own research competence. During the trajectory they experienced that they became more research-minded.

With the exception of one participant, all participants mentioned that they view that their research product can be implemented into their own daily practice. Some of them already did this; others view good opportunities in the coming months. One participant did not see any possibilities because of the reluctance of the colleagues in her department and the inconsistent behaviour of her principal.

A majority of the participants experience that there is attention for their product. Some participants informed their own colleagues whereas in some cases colleagues asked themselves for more information and how their products can be implemented in daily practice.

Some participants were pessimistic about the possibilities for further development and implementation of their products. According to them they view their principals were rather reluctant and did not really support the implementation of their research products.

Finally participants were asked to reflect on their ability to conduct research on their own without any support of external researchers. Most participants felt they are able to do so. Some of them mentioned they already worked quite independently during the trajectory. Two participants have doubts about their ability to research without any external support.

*“During this trajectory we received some support, though not very much. Since our external researcher pointed at the pitfalls during our trajectory, I assume that I’m able to avoid them in my future research.” (participant 2)*

### **Findings school managers**

In general the three school managers were satisfied with the entire set up and the implementation of the trajectory. Two of them were really impressed by the presentations and reports of their teachers at the closing of the trajectory. They experienced immediate progress in some daily school matters as a result of the trajectory:

*“ I think this is a good concept. It challenges teachers to demonstrate their competences what they are able to and to further develop themselves. And not unimportant the trajectory offers the teachers support in this. The role of the external agency (RdMC) could have been slightly better with respect to supporting teachers*

*in methodological issues. Since research is not the core business of teachers they should receive more support. For example with offering a comprehensive course in research skills and knowledge”.*

They also observed changes in the behaviour of teachers that did not participate in the trajectory. This was most significant when teachers who participated in the trajectory organised sessions to inform their colleagues about the findings and the results of the trajectories.

The third school manager was more critical. He viewed that some participating teachers did not really composed a comprehensive research plan in the early stage of the trajectory resulting in some less optimal results and findings at the end. In addition, he viewed the feedback of the external panel on teachers' final presentations at the closing of the trajectory as rather mild which caused that some of the participating teachers overestimated their own research performance as too optimistic.

### **Findings experts**

Both experts from the external agency emphasised that the circumstances were not adequate for achieving high quality outcomes since teachers are novices in research the outcomes were as could be expected. Moreover, it was not only a new endeavour for the teachers but also for their school managers who were not used to design trajectories from human resource management perspective. Especially the fact how to combine the individual professionalization of teachers with school development appeared to be rather problematic. For example, school managers did not beforehand realise how much time and support teachers really need to conduct some research. Also school managers did not discuss with their teachers individually how this research fits into the teachers own tasks and their career intentions.

On the other hand the experts viewed that the teachers themselves were not fully aware of their own (lack of) research skills, their professional needs and their career intentions. This hampered the set up and implementation of teachers own research plans in the early stage of the trajectory. In addition, the amount of time available for teachers to conduct their research differed per teacher. In general the available amount of time was not sufficient. Lack of time was not only an obstacle for the teachers but also for the experts that were involved to support the teachers in coaching during the trajectory. The experts viewed that it is not just a lack of proper circumstances and resources but also schools have no tradition in conducting research and human resource management and therefore it is not embedded in the minds and behaviour of all participants.

### **Conclusion and discussion**

This evaluation was set up to collect data on teachers 'research trajectories' within three secondary schools. Since research trajectories for teachers are a new phenomenon in the Netherlands the goal of this evaluation was to collect information that can be used for the design of future runs of research trajectories. Therefore data was collected in a rather structured manner from all participants: teachers, their school managers and external experts from an agency (RdMC). In total 9 of the 13 participating teachers mailed their questionnaire, three school managers and two external experts were involved in the evaluation.

The first conclusion is that participating teachers succeeded in conducting some research within their own practice. In general they view the results and the findings of their research as satisfactory. With regard of the process of their trajectories they viewed that more support could be beneficial for speeding up and improving the quality of their trajectories. They experienced their research trajectories were rather individual and solitaire endeavours and they had to conduct research quite in relative

solitude. Support is perceived as more support from their own managers and the external experts with respect to research skills and knowledge.

The second conclusion is that school managers did not have clear views on what is needed to make these trajectories successful. In addition, they had different goals. The first goal was to increase the research competences of their teachers and the second goal is that the teachers' research performance was used as one of the criteria for appointing teachers in senior job positions. These mixed goals blurred the set up and implementation of the trajectories. Not at least since all participating teachers were also aware of the existence of these different goals. It is quite likely that this affected the behaviour of the teachers as well. For example, asking for additional support could be considered as a lack of capacity in the eyes of the school managers. In general school managers were satisfied with the course and results of the research trajectories though critical remarks were made concerning the quality of the outcomes and the usability of the products for the future school development. The third conclusion concerns the role of the experts during the set up and implementation of the trajectories. They viewed their role was supporting but could have been more significant if there were more resources for supporting teachers and school managers as well.

Though this evaluation provided interesting insights into the research trajectories there are some shortcomings that need to be mentioned. For example, not all participating teachers were included in the evaluation and the request for an evaluation was made after the trajectories were almost finished which hampers the collection of data during the trajectory.

Therefore these results offer an interesting insight into an emerging research practice but are only of limited value when generalisation of the findings is at stake. Nevertheless, the findings do offer information that can be used for increasing future trajectories. Here the main recommendations are briefly summarised.

Many things were not clear beforehand and needed to be solved during the course of the trajectories. It is essential that there is a clear design of the trajectory that meets the intended goals. That also allows seeing whether there are conflicting interests as were observed now in the trajectory. Clear procedures for admittance, and the expected outcomes, milestones of the trajectory are necessary. It is recommendable to design the trajectory with the school managers beforehand and to assure that the commitment of teachers and other stakeholders (like the human resource management department) is guaranteed.

A broader view on what it means to conduct research is necessary. It is not sufficient to seek for solutions how to improve teachers' research skills but also it is required to dedicate attention to additional knowledge and skills. For example, writing skills, information-seeking skills, and project management skills. Moreover, there needs to be clarity about what research actually means. Some teachers see reading an interesting article already as doing research, while others see research as more academic research and want to collect rather impressive data but do not know how to set this up, analyse the findings and so on. A trajectory like this should be preceded by a course in appropriate research skills and additional skills and knowledge.

The findings indicate that among teachers there were different mental frameworks on what research means. Also school managers had their own opinions about this. This should not be addressed as a problem as long as there is no awareness of the fact that views on research can differ quite strongly. This awareness need to be an issue in the training and coaching of teachers and school managers and by doing so this will offer interesting discussions that allow participants to take into account other research views as well which may support teachers in choosing an appropriate set up of their own research. Appropriate means not just appropriate from a research point of view but appropriate also means that

the research is well embedded in the development and innovation of the school and their own teaching practices.

Altogether the findings are quite promising but there is need to increase the efforts to design research trajectories for teachers and to collect data on these endeavours to further improve the design and implementation of these trajectories. Associations like the ATEE can play an important role in the further professional development of these kinds of trajectories.

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